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SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Na	·······	Sin J. Lee	Examiner 7	4: 760	60 Date:	8-11-2005
Art Unit:		Number 30 2	-1333 Serial	Number:	10/04	3,441
Mail Box and Bldg/	Room Locati	on: <u>4060</u> CR&m.	_ Results Format F	Preferred (cir	cle): RAPER	DISK E-MAII
If more than one s	earch is sub	mitted, please n	/ rioritize searches	in order of	need.	
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Please provide a detaile Include the elected spec utility of the invention.	Define any tern	, keywords, synonym ns that may have a sp	ns, acronyms, and regis	try numbers a	ind combine with	the concent or
known. Please attach a	_					
Title of Invention:	P12.	: sie Bik	?			
Inventors (please prov	vide full names):					
						SÉNICE BR
Earliest Priority Fili	ng Date:			::6l0	NTITIC HEFE	· Cn'
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O-1590 (8-01)						-

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=> fil req
FILE 'REGISTRY' ENTERED AT 15:07:55 ON 09 SEP 2005
=> d his
     FILE 'HCAPLUS' ENTERED AT 13:05:34 ON 09 SEP 2005
L1
              0 S US20040137366/PN
     FILE 'WPIX' ENTERED AT 13:07:14 ON 09 SEP 2005
L2
              1 S L1
     FILE 'HCAPLUS' ENTERED AT 13:08:57 ON 09 SEP 2005
             73 S KAWAUCHI I?/AU
L3
           1892 S NAKAMURA I?/AU
L4
           1705 S TSUCHIYA M?/AU
L5
L6
              4 S L3 AND L4 AND L5
              1 S L6 AND HEAT?
L7
L8
              4 S L6 AND LITHOGRA?
                SEL RN
     FILE 'REGISTRY' ENTERED AT 13:12:18 ON 09 SEP 2005
L9
             86 S E1-E86
     FILE 'LREGISTRY' ENTERED AT 13:40:49 ON 09 SEP 2005
L10
                STR
     FILE 'REGISTRY' ENTERED AT 13:52:52 ON 09 SEP 2005
L11
                SCR 2043
L12
             50 S L10 AND L11
                STR L10
L13
             23 S L13 AND L11
L14
           3527 S L13 AND L11 FUL
L15
                SAV L15 LEE441/A
     FILE 'HCAPLUS' ENTERED AT 14:03:47 ON 09 SEP 2005
L16
           2417 S L15
                E LITHOGR?
                E LITHOGRAPH
            195 S L16 (L) LITHOGRAPH?
L18
             15 S L17 AND HEAT (A) SENSITIV?
L19
             19 S L17 AND PRECURSOR?
L20
             31 S L18 OR L19
   FILE 'REGISTRY' ENTERED AT 15:07:55 ON 09 SEP 2005
=> d que 116
                SCR 2043
L11
L13
                STR
               OH
                            A @8
                                     C=== 0
                                             o-c=o
                                    @9 10
                                             @13 @11 12
CH2= C-/ G1/ G2-/ C=0
1 2 3 4 5 6
VAR G1=CB/9/13-2 11-4/11-2 13-4
REP G2 = (0-5) 8
NODE ATTRIBUTES:
NSPEC
       IS RC
                  AΤ
DEFAULT MLEVEL IS ATOM
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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

L15 3527 SEA FILE=REGISTRY SSS FUL L13 AND L11 L16 2417 SEA FILE=HCAPLUS ABB=ON PLU=ON L15

=> fil hcap FILE 'HCAPLUS' ENTERED AT 15:08:18 ON 09 SEP 2005

=> d l20 1-31 ibib abs hitstr hitind

L20 ANSWER 1 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2005:303261 HCAPLUS

DOCUMENT NUMBER:

142:382218

TITLE:

Lithographic printing plate precursor

and lithographic printing method

INVENTOR(S):

Makino, Naonori; Inno, Toshifumi; Yamasaki,

Sumiaki

PATENT ASSIGNEE(S):

Japan

SOURCE:

U.S. Pat. Appl. Publ., 35 pp.

CODEN: USXXCO

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
			<u>-</u>	-	
US 2005074692	A1	20050407	US 2004-951700		
	•				2004 0929
JP 2005125749	A2	20050519	JP/2004-265735		<u>9323</u>
					2004
•					0913
PRIORITY APPLN. INFO.:			/ JP 2003-339391	Α	
,					2003
		/			0930

AB A lithog. printing plate precursor comprises: a support; and at least one layer comprising an image-recording layer, the image-recording layer comprising (A) an IR absorber, (B) a polymerization initiator, (C) a polymerizable compound, and (D) a binder polymer, wherein the image recording layer is capable of being removed with at least one of a printing ink and a fountain solution, wherein at least one of said at least one layer comprises a copolymer having (a1) a unit comprising at least one ethylenically unsatd. bond, and (a2) a unit comprising at least one functional group interacting with a surface of the support. And a lithog. printing method in which the lithog. printing plate precursor is used. The copolymer preferably has a hydrophilic segment. The copolymer preferably is contained in an undercoat layer formed between the support and the image-recording layer.

IT 194715-96-3P 849467-38-5P 849467-41-0P 849467-48-7P 849467-49-8P 849467-50-1P

(lithog. printing plate precursor containing)

RN 194715-96-3 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer with 1,2-ethanediyl bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 46917-20-8 CMF C13 H15 N O4

$$HO_2C-CH_2$$
 $HO_2C-CH_2-N-CH_2$
 $CH=CH_2$

CM 2

CRN 97-90-5 CMF C10 H14 O4

RN 849467-38-5 HCAPLUS

CN Benzoic acid, 4-ethenyl-, sodium salt, polymer with 1,2-ethanediyl bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 77124-40-4 CMF C9 H8 O2 . Na

Na

CM 2

CRN 97-90-5

CMF C10 H14 O4

RN 849467-41-0 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, disodium salt, polymer with 1,2-ethanediyl bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 68517-06-6 CMF C13 H15 N O4 . 2 Na

$$\begin{array}{c} \text{HO}_2\text{C}-\text{CH}_2\\ \text{HO}_2\text{C}-\text{CH}_2-\text{N}-\text{CH}_2\\ \end{array}$$

•2 Na

CM 2

CRN 97-90-5 CMF C10 H14 O4

RN 849467-48-7 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, disodium salt, polymer with 2-[[[(carboxymethyl)[(4-ethenylphenyl)methyl]amino]acetyl]amino]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 849467-47-6 CMF C19 H24 N2 O5

CM 2

CRN 68517-06-6 CMF C13 H15 N O4 . 2 Na

$$HO_2C-CH_2$$
 $HO_2C-CH_2-N-CH_2$
 $CH=CH_2$

●2 Na

RN 849467-49-8 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer
with 2-[[[(carboxymethyl)[(4-ethenylphenyl)methyl]amino]acetyl]ami
no]ethyl 2-methyl-2-propenoate and N-(1-methylethyl)-2-propenamide
(9CI) (CA INDEX NAME)

CM 1

CRN 849467-47-6 CMF C19 H24 N2 O5

CM 2

CRN 46917-20-8 CMF C13 H15 N O4

$$HO_2C-CH_2$$
 $HO_2C-CH_2-N-CH_2$
 $CH=CH_2$

CM 3

CRN 2210-25-5 CMF C6 H11 N O

RN 849467-50-1 HCAPLUS

CN Glycine, N-(carboxymethyl)-N-[(4-ethenylphenyl)methyl]-, polymer
with 2-[[[(carboxymethyl)[(4-ethenylphenyl)methyl]amino]acetyl]ami
no]ethyl 2-methyl-2-propenoate and 2-methyl-2-[(1-oxo-2propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA
INDEX NAME)

CM 1

CRN 849467-47-6 CMF C19 H24 N2 O5

CM 2

CRN 46917-20-8 CMF C13 H15 N O4

$$\begin{array}{c} \text{HO}_2\text{C-CH}_2\\ \text{HO}_2\text{C-CH}_2-\text{N-CH}_2\\ \end{array}$$

```
CM
      3
```

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

$$\begin{array}{c} & \circ \\ & | | \\ & \text{NH-C-CH} = \text{CH}_2 \\ & | \\ & \text{Me-C-CH}_2 - \text{SO}_3\text{H} \\ & | \\ & \text{Me} \end{array}$$

Na

ICM G03C001-76

INCL 430270100

74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35, 38

ST lithog printing plate precursor

TT Optical materials

> (IR absorbers; lithog. printing plate precursor and lithog. printing method)

IT IR materials

> (absorbers; lithog. printing plate precursor and lithog. printing method)

IT Lithographic plates

(lithog. printing plate precursor and lithog.

printing .method)

IT 83176-82-3P 93441-11-3P 194715-96-3P

> 849467-38-5P 849467-39-6P 849467-40-9P

849467-41-0P 849467-43-2P 849467-44-3P 849467-45-4P

849467-46-5P 849467-48-7P 849467-49-8P

849467-50-1P 849467-51-2P 849467-52-3P 849467-53-4P

849467-54-5P 849467-55-6P

(lithog. printing plate precursor containing)

L20 ANSWER 2 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2005:215777 HCAPLUS

DOCUMENT NUMBER:

142:269282 **Heat-sensitive**

TITLE:

lithographic printing master plates for development-free CTP (computer-to-plate) system with improved wear resistance Yamazaki, Sumiaki; Aoshima, Norio

INVENTOR(S): PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 32 pp.

SOURCE: CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.

KIND DATE APPLICATION NO.

DATE

LEE 10/743,44 _ _ **_ _ _ _** _ _ _ JP 2005059378 20050310 JP 2003-292225 A2 2003 0812 PRIORITY APPLN. INFO.: JP 2003-292225 2003 0812

The plates have ink-receiving layers (A) containing polymers bearing AΒ cationic groups, groups including 2 carbonyls linked via 1 of C or N atom, and/or lactone groups, hydrophilic layers (B) containing colloidal particles of oxides or hydroxides of Be, Mg, Al, Si, Ti, B, Ge, Sn, Zr, Ir, V, Sb, and/or transition metals, and optionally hydrophilic overcoat layers (C, removable on printers) in this order on supports, wherein A, B, and/or C contain light-heat converting agents.

IT220227-02-1

> (binder, ink-receiving layer; heat-sensitive lithog. printing plates with good wear resistance for development-free CTP system)

220227-02-1 HCAPLUS RN

CNBenzenemethanaminium, 4-ethenyl-N,N,N-triethyl-, chloride, polymer with 4-ethenylbenzoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 14350-43-7 CMF C15 H24 N . Cl

C1 -

CM

CRN 1075-49-6 CMF C9 H8 O2

$$HO_2C$$
 $CH = CH_2$

IC ICM B41N001-14

ICS G03F007-00; G03F007-004; G03F007-11

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and

```
Other Reprographic Processes)
     Section cross-reference(s): 38
     lithog plate oxide hydrophilic coating CTP; heat
ST
     sensitive printing plate IR absorber; wear resistance
     cationic polymer ink receiver
     Optical materials
IT
        (IR absorbers; heat-sensitive lithog.
        printing plates with good wear resistance for development-free
       CTP system)
     IR materials
ΙT
        (absorbers; heat-sensitive lithog. printing
       plates with good wear resistance for development-free CTP
        system)
IT
     Polymers, uses
        (bearing cationic, dicarbonyl, or lactone groups, binder,
        ink-receiving layer; heat-sensitive lithog.
       printing plates with good wear resistance for development-free
       CTP system)
IT
     Hydroxides (inorganic)
     Oxides (inorganic), uses
        (colloidal particle, hydrophilic layer; heat-
        sensitive lithog. printing plates with good wear
       resistance for development-free CTP system)
IT
    Lithographic plates
        (heat-sensitive lithog. printing plates
       with good wear resistance for development-free CTP system)
ΙT
     Colloids
        (hydrophilic layer; heat-sensitive lithog.
       printing plates with good wear resistance for development-free
       CTP system)
IT
     Silica gel, uses
        (hydrophilic layer; heat-sensitive lithog.
       printing plates with good wear resistance for development-free
       CTP system)
IT
     134127-48-3
        (IR absorber, ink-receiving layer; heat-
       sensitive lithog. printing plates with good wear
       resistance for development-free CTP system)
TΤ
     27901-88-8 220227-02-1
                             845867-51-8
                                            845867-52-9
     845867-53-0
                   845867-54-1
                                 845867-55-2
        (binder, ink-receiving layer; heat-sensitive
       lithog. printing plates with good wear resistance for
       development-free CTP system)
     9000-01-5, Arabic gum
IT
        (binder, overcoat layer; heat-sensitive
       lithog. printing plates with good wear resistance for
       development-free CTP system)
     7631-86-9, Silica, uses
IT
        (colloidal particle, hydrophilic layer; heat-
       sensitive lithog. printing plates with good wear
       resistance for development-free CTP system)
IT
     9003-01-4, Acrylic acid polymer
        (hydrophilic layer; heat-sensitive lithog.
       printing plates with good wear resistance for development-free
       CTP system)
     37321-70-3, JIS A 1050
TТ
        (support; heat-sensitive lithog. printing
       plates with good wear resistance for development-free CTP
       system)
```

L20 ANSWER 3 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2005:122676 HCAPLUS

DOCUMENT NUMBER:

142:228751

TITLE:

SOURCE:

Radical polymerizable composition and lithographic printing plate precursor

using the same

INVENTOR(S):

Kakino, Ryuki; Kunita, Kazuto Fuji Photo Film Co., Ltd., Japan U.S. Pat. Appl. Publ., 45 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent English

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005031986	A1	20050210	US 2004-900169	2004
JP 2005062856	A2	20050310	JP 2004-220626	2004
PRIORITY APPLN. INFO.:			JP 2003-202332	0728 A 2003
				0728

AB A radical polymerizable composition comprises (A) an alkali-soluble resin containing a radical polymerizable group, (B) a radical polymerizable compound, and (C) a radical initiator, wherein reactivity of a polymerizable group of the polymerizable compound (B) to a polymerizable group of the polymerizable compound (B) is larger than reactivity of a polymerizable group of the polymerizable compound (B) to a radical polymerizable group of the alkali-soluble resin (A), and a reactivity of a radical polymerizable group of the alkali-soluble resin (A) to a polymerizable group of the polymerizable compound (B) is larger than reactivity of a radical polymerizable group of the alkali-soluble resin (A) to a radical polymerizable group of the alkali-soluble resin (A).

IT 840488-60-0P

(radical polymerizable composition for lithog. printing plate precursor containing)

RN 840488-60-0 HCAPLUS

CN 1,3-Benzenedicarboxylic acid, 5-(1-methylethenyl)-, polymer with (4-ethenylphenyl)methyl 2-methyl-2-propenoate and 1-methylethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 840488-59-7 CMF C11 H10 O4

$$\begin{array}{c} \text{CH}_2\\ \parallel\\ \text{C}-\text{Me} \end{array}$$

CM 2

CRN 99413-45-3 CMF C13 H14 O2

$$\begin{array}{c|c} ^{H_2C} & \text{O} \\ \parallel & \parallel \\ \text{Me-C-C-O-CH}_2 \\ \hline \\ \text{CH-CH}_2 \end{array}$$

CM 3

CRN 4655-34-9 CMF C7 H12 O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{i-PrO-} \text{C-} \text{C-} \text{Me} \end{array}$$

IC ICM G03C001-76

INCL 430270100

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38

ST radical polymerizable compn lithog printing plate precursor

IT Lithographic plates

(radical polymerizable composition and lithog. printing plate precursor using same)

IT 840488-52-0P 840488-53-1P 840488-54-2P 840488-55-3P 840488-56-4P 840488-57-5P 840488-58-6P 840488-60-0P 840488-61-1P

(radical polymerizable composition for lithog. printing plate precursor containing)

IT 1985-51-9 3290-92-4 29570-58-9 79559-96-9 158464-09-6 (radical polymerizable composition for lithog. printing plate precursor containing)

L20 ANSWER 4 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN ACCESSION NUMBER: 2004:1080080 HCAPLUS

DOCUMENT NUMBER:

142:65347

TITLE:

Heat-sensitive

positive-working lithographic printing plate

precursors

INVENTOR(S):

Sasaki, Hideto

PATENT ASSIGNEE(S): SOURCE: Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 40 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004354905	A2	20041 2 16	JP 2003-155257	
				2003
				0530
PRIORITY APPLN. INFO.:			JP 2003-155257	
		,	•	2003
				0530

AB The title precursor has an intermediate layer containing a polymer and an image-recording layer, which increases the solubility towards an alkaline solution by heat, on an aluminum support, which is roughened, anodized, and treated with alkali metal silicate, wherein the anodization provides 3-8 µm average pore size in the formed surface layer, wherein the support has 1-10 mg/m2 of fixed Si on the surface, and wherein the intermediate layer is made of 10-40 mg/m2 coating. The precursor shows good development properties and provides printing plate of high printing durability.

IT 220227-02-1, 4-Vinylbenzoic acid-Triethyl (p-vinylbenzyl) ammonium chloride copolymer (intermediate layer; heat-sensitive pos.-working lithog. printing plate

precursors)

RN 220227-02-1 HCAPLUS

Benzenemethanaminium, 4-ethenyl-N,N,N-triethyl-, chloride, polymer with 4-ethenylbenzoic acid (9CI) (CA INDEX NAME)

CM 1

CN

CRN 14350-43-7 CMF C15 H24 N . Cl

2003

```
CM
          2
     CRN 1075-49-6
     CMF C9 H8 O2
HO<sub>2</sub>C
             CH = CH_2
IC
     ICM G03F007-11
     ICS G03F007-00; G03F007-09
     74-6 (Radiation Chemistry, Photochemistry, and Photographic and
CC
     Other Reprographic Processes)
     heat pos lithog printing plate precursor support
ST
     intermediate layer
     Anodization
IT
     Surface roughness
        (heat-sensitive pos.-working lithog.
        printing plate precursors)
IT
     Lithographic plates
        (precursors, heat-sensitive,
        pos.-working; heat-sensitive pos.-working
        lithog. printing plate precursors)
IT
     12627-13-3D, Silicate, alkali metal
        (heat-sensitive pos.-working lithog.
        printing plate precursors)
IT
     220227-02-1, 4-Vinylbenzoic acid-Triethyl(p-
     vinylbenzyl)ammonium chloride copolymer
        (intermediate layer; heat-sensitive
        pos.-working lithog. printing plate
        precursors)
IT
     39364-62-0
        (support; heat-sensitive pos.-working
        lithog. printing plate precursors)
L20 ANSWER 5 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
                          2004:1076959 HCAPLUS
DOCUMENT NUMBER:
                          142:65344
TITLE:
                         Heat-sensitive
                         positive-working lithographic print/ng plate
                         precursors
INVENTOR(S):
                          Sasaki, Hideto
PATENT ASSIGNEE(S):
                          Fuji Photo Film Co., Ltd., Japan
SOURCE:
                          Jpn. Kokai Tokkyo Koho, 35/pp.
                          CODEN: JKXXAF
DOCUMENT TYPE:
                          Patent
LANGUAGE:
                          Japanese
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                         KIND
                                 DATE
                                             APPLICATION NO.
                                                                     DATE
     JP 2004354918
                          A2
                                 20041216
                                             JP 2003-155431
```

USHA SHRESTHA EIC 1700 REM 4B28

PRIORITY APPLN. INFO.:

JP 2003-155431

2003 0530

0530

AB The title **precursor** has an intermediate layer containing a polymer and an image-recording layer, which increases solubility towards an alkaline solution by heat, on an aluminum support, wherein the intermediate layer has ≥50 % surface carbon concentration by X-ray electron spectroscopy anal. and wherein the support has ≥6 mg/m2 absorption of the polymer used for the intermediate layer by dipped in 5 % polymer in MeOH solution at 25° C for 300 s and washed with methanol. The **precursor** shows good development properties and provides printing plate of high printing durability.

808143-96-6, Triethyl(p-vinylbenzyl)ammonium chloride-4-vinylbenzoic acid-2-Propenoic acid, tetrahydro-2-oxo-3-furanyl ester copolymer (intermediate layer; heat-sensitive pos.-working lithog. printing plate precursors)

RN 808143-96-6 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-triethyl-, chloride, polymer with 4-ethenylbenzoic acid and tetrahydro-2-oxo-3-furanyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 328249-37-2 CMF C7 H8 O4

CM 2

CRN 14350-43-7 CMF C15 H24 N . Cl

• cl -

CM 3

CRN 1075-49-6 CMF C9 H8 O2

```
HO<sub>2</sub>C
                           CH = CH_2
```

IC ICM G03F007-11

ICS G03F007-00; G03F007-004

74-6 (Radiation Chemistry, Photochemistry, and Photographic and CC Other Reprographic Processes)

ST heat pos lithog printing plate precursor support intermediate layer

IT Lithographic plates

(precursors, heat-sensitive,

pos.-working; heat-sensitive pos.-working

lithog. printing plate precursors)

IT 808143-96-6, Triethyl (p-vinylbenzyl) ammonium chloride-4-vinylbenzoic acid-2-Propenoic acid, tetrahydro-2-oxo-3-furanyl ester copolymer (intermediate layer; heat-sensitive pos.-working lithog. printing plate precursors)

IT 7429-90-5, Aluminum, uses

> (support; heat-sensitive pos.-working lithog. printing plate precursors)

L20 ANSWER 6 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:1038492 HCAPLUS

DOCUMENT NUMBER:

142:45928

TITLE:

Presensitized positive-working lithographic

plate master showing excellent printability as

well as smear resistance

INVENTOR(S):

Takahashi, Miki; Sasaki, Hideto; Hotta,

Hisashi

PATENT ASSIGNEE(S):

SOURCE:

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 51 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004341141	A2	20041202	JP 2003-136545	2002
PRIORITY APPLN. INFO.:			JP 2003-136545	2003 0514
				2003 0514

AB The title lithog. plate master includes an intermediate layer interposed between a hydrophilic support and a pos.-working

heat-sensitive layer, wherein the intermediate layer contains a compound capable of interacting to a water-insol. alkali-soluble polymer. The compound is a polymer having a functional side chain(s) selected from -Y-Ar, -Y-(CnH2nO)m-R1, -Y-CO-NR3R2, and -Y-NR5-CO-R4 [Y = single bond, connection group; Ar = N-containing heteroaryl; R1-5 = H, C1-30-hydrocarbyl; m = 1-100; $n \ge 2$]. 604813-21-0 803729-44-4

(in intermediate layer of presensitized pos.-working lithog. plate master showing excellent printability as well as smear resistance)

RN 604813-21-0 HCAPLUS

CN Benzoic acid, 4-ethenyl-, polymer with 2-methyl-N-phenyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

IT

CRN 1611-83-2 CMF C10 H11 N O

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{PhNH-C-C-Me} \end{array}$$

CM 2

CRN · 1075-49-6 CMF C9 H8 O2

RN 803729-44-4 HCAPLUS

CN Benzoic acid, 4-ethenyl-, polymer with α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0 CMF (C2 H4 O)n C5 H8 O2 CCI PMS

$$H_2C$$
 O Me C C C O CH_2 CH_2 O O O

CM 2

CRN 1075-49-6 CMF C9 H8 O2

$$HO_2C$$
 $CH = CH_2$

IC ICM G03F007-11

ICS G03F007-00; G03F007-004

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 9003-39-8 25232-41-1 28062-44-4 **604813-21-0**

803729-44-4 803729-45-5

(in intermediate layer of presensitized pos.-working lithog. plate master showing excellent printability as well as smear resistance)

L20 ANSWER 7 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:876832 HCAPLUS

DOCUMENT NUMBER:

141:372803

TITLE:

Positive-working lithographic printing master

plate having graft copolymer interlayer on

support

INVENTOR(S):

Tashiro, Hiroshi; Takahashi, Miki, Hotta,

Hisashi

PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 38 pp.

SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE:

LANGUAGE:

Patent Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004294908	A2	20041021	JP 2003-89094	2003
PRIORITY APPLN. INFO.:			JP 2003-89094	0327
				2003 0327

AB Disclosed is the pos. working lithog. printing master comprising on a support a graft copolymer interlayer, a water-soluble lower layer containing an alkali-soluble resin, and a water-soluble upper heat-sensitive layer containing an alkali-soluble resin and an IR-absorbing dye in the order. The use of the interlayer provided excellent sensitivity, development latitude, and printing durability.

TT 777948-09-1P, p-Vinylbenzoic acid-glycidyl
methacrylate-vinylbenzyltriethylammonium chloride graft copolymer
777948-10-4P, p-VinylBenzoic acid-glycidyl
methacrylate-α-methacryloyloxy-γ-butyrolactone graft
copolymer

(pos.-working lithog. printing master plate having

graft copolymer interlayer on support)

RN 777948-09-1 HCAPLUS

CN Benzenemethanaminium, ar-ethenyl-N,N,N-triethyl-, polymer with 4-ethenylbenzoic acid and oxiranylmethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 112708-38-0 CMF C15 H24 N CCI IDS

 $D1-CH=CH_2$

 Et_3+N-CH_2-D1

CM 2

CRN 1075-49-6 CMF C9 H8 O2

CM 3

CRN 106-91-2 CMF C7 H10 O3

$$\stackrel{\text{O}^{\boldsymbol{\cdot}}}{\underset{\text{CH}_2-\text{O}-\text{C}-\text{C}-\text{Me}}{\overset{\text{O}}{\bigcirc}}} \stackrel{\text{CH}_2}{\underset{\text{CH}_2}{\parallel}}$$

RN 777948-10-4 HCAPLUS

CN Benzoic acid, 4-ethenyl-, polymer with oxiranylmethyl 2-methyl-2-propenoate and tetrahydro-2-oxo-3-furanyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 195000-66-9

CMF C8 H10 O4

CM 2

CRN 1075-49-6 CMF C9 H8 O2

CM 3

CRN 106-91-2 CMF C7 H10 O3

$$\begin{tabular}{c|c} O & O & CH_2 \\ \hline & \parallel & \parallel \\ CH_2-O-C-C-Me \\ \end{tabular}$$

IC ICM G03F007-11

ICS G03F007-00; G03F007-004

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38

TT 777948-09-1P, p-Vinylbenzoic acid-glycidyl methacrylate-vinylbenzyltriethylammonium chloride graft copolymer 777948-10-4P, p-VinylBenzoic acid-glycidyl methacrylate-α-methacryloyloxy-γ-butyrolactone graft copolymer

(pos.-working lithog. printing master plate having graft copolymer interlayer on support)

L20 ANSWER 8 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:871271 / HCAPLUS

DOCUMENT NUMBER:

141:372783

TITLE:

Positive working lithographic printing master plate having lactone-based polymer interlayer

on support
INVENTOR(S): Taskiro, H

Tashiro, Hiroshi; Takahashi, Miki; Hotta,

Hisashi

PATENT ASSIGNEE (S):

SOURCE:

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 39 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

NT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
 JP 2004294909	A2	20041021	JP 2003-89095	
0. 200.2000				2003 0327
PRIORITY APPLN. INFO.:			JP 2003-89095	0327
				2003
			•	0327

AB Disclosed is the pos.-working lithog. printing master comprising on a support an interlayer made from a lactone-based polymer, a water-soluble lower layer containing an alkali-soluble resin, and a water-soluble upper heat-sensitive layer containing an alkali-soluble resin and an IR-absorbing dye in the order. The use of the interlayer provided excellent sensitivity, development latitude, and printing durability.

IT 777947-84-9

(pos.-working lithog. printing master plate having lactone-based polymer interlayer on support)

RN 777947-84-9 HCAPLUS

CN 1-Propanaminium, N,N,N-triethyl-2-hydroxy-3-[(1-oxo-2-propenyl)oxy]-, chloride, polymer with 4-ethenylbenzoic acid and tetrahydro-4,4-dimethyl-2-oxo-3-furanyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 777947-83-8 CMF C12 H24 N O3 . Cl

• cl -

CM 2

CRN 84822-49-1 CMF C9 H12 O4

CM 3

CRN 1075-49-6 CMF C9 H8 O2

HO₂C CH CH₂

IT 669013-38-1P, α -Methacryloyloxy- γ -

butyrolactone-p-vinylbenzoic acid copolymer

(pos.-working lithog. printing master plate having

lactone-based polymer interlayer on support)

RN 669013-38-1 HCAPLUS

CN Benzoic acid, 4-ethenyl-, polymer with tetrahydro-2-oxo-3-furanyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 195000-66-9 CMF C8 H10 O4

CM 2

CRN 1075-49-6 CMF C9 H8 O2

IC ICM G03F007-11

ICS G03F007-00; G03F007-004

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38

IT 777947-84-9

(pos.-working lithog. printing master plate having lactone-based polymer interlayer on support)

IT 669013-38-1P, α -Methacryloyloxy- γ -butyrolactone-p-vinylbenzoic acid copolymer

outyrolactone-p-vinylbenzoic acid copolymer

(pos.-working lithog. printing master plate having lactone-based polymer interlayer on support)

L20 ANSWER 9 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:801659 HCAPLUS

DOCUMENT NUMBER:

. 141:304335

TITLE:

SOURCE:

Original plate of lithographic printing plate

INVENTOR(S): Aogo, Toshiaki

PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 28 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
·································				
JP 2004272058	A2	20040930	ØP-2003-64761	•
				2003
•				0311
PRIORITY APPLN. INFO.:			JP 2003-64761	
				2003
			•	0311

OTHER SOURCE(S):

MARPAT 141:304335

The invention is concerned about an original plate for making IR laser pos. lithog. printing plate using direct plate-making method. The plate comprises, on a support having a hydrophilic surface, a heat-sensitive layer containing (A) a water-insol. alkali soluble resin, (B) an IR-absorbing dye, and (C) a cyclodextrin derivative The heat-sensitive layer has an increased solubility in aqueous alkali solution upon IR exposure. IT

220227-02-1

(substrate surface coating; original plate of lithog. printing plate containing cyclodextrin derivs.)

RN220227-02-1/ HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-triethyl-, chloride, polymer with 4-ethenylbenzoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 14350-43-7 CMF C15 H24 N . Cl

```
CM 2
```

CRN 1075-49-6 CMF C9 H8 O2

IC ICM G03F007-004

ICS G03F007-00; G03F007-11

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 220227-02-1

(substrate surface coating; original plate of lithog. printing plate containing cyclodextrin derivs.)

L20 ANSWER 10 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:779269 HCAPLUS

DOCUMENT NUMBER:

141:285849

TITLE:

IR-sensitive direct-imaging lithographic

printing plate precursors

INVENTOR(S):

Nagashima, Akira

PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 29 pp.

SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE:

LANGUAGE:

Patent Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004264747	A2	20040924	JP 2003-57123	2003
CN 1527137	A	20040908	CN 2003-10114267	0304 2003
PRIORITY APPLN. INFO.:			JP 2003-57123	1112 A 2003
				0304

The title printing plate precursor has an olefinic resin, a novolak resin, and a light-to-heat converting compound on a hydrophilized support, wherein the olefinic resin is a copolymer of H2C=C(-R1)(-X-COOH)(R1 = H, alkyl; X = arylene, -CO-Y-, -OCO-Y-, -Ar-Y-; Y = 2-valent connecting group; Ar = arylene) and (meth)acrylate, a (meth)acrylamide derivative, or a styrene derivative and wherein the surface of the support is electrochem. roughened in acidic solution mainly containing hydrogen chloride. The printing plate precursor shows wide development latitude and provides printing plate of high printing durability.

IT 604813-23-2

(IR-sensitive direct-imaging lithog. printing plate

precursors)

RN 604813-23-2 HCAPLUS

CN Benzoic acid, 4-ethenyl-, polymer with 1-bromo-4-ethenylbenzene and N-(1,1-dimethylethyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 2039-82-9 CMF C8 H7 Br

CM 2

CRN 1075-49-6 CMF C9 H8 O2

CM 3

CRN 107-58-4 CMF C7 H13 N O

IC ICM G03F007-033

ICS B41N001-08; B41N003-03; G03F007-004; G03F007-09

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) Section cross-reference(s): 35

ST IR lithog printing plate precursor support resin

IT Phenolic resins, uses

(novolak; IR-sensitive direct-imaging lithog. printing plate
precursors)

IT 7647-01-0, Hydrogen chloride, processes 27029-76-1
 (IR-sensitive direct-imaging lithog. printing plate
 precursors)

IT 604813-23-2 604813-56-1 604813-57-2 604813-62-9

```
604813-64-1
                   604813-65-2
                                 604813-66-3
                                              760965-90-0
        (IR-sensitive direct-imaging lithog. printing plate
        precursors)
IT
     1344-09-8, Sodium silicate
        (hydrophilizing agent; IR-sensitive direct-imaging lithog.
        printing plate precursors)
IT
     37321-70-3, JIS A1050
        (support; IR-sensitive direct-imaging lithog. printing plate
        precursors)
L20 ANSWER 11 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
                         2004:612321 HCAPLUS
DOCUMENT NUMBER:
                         141:148156
                         Method for making lithographic printing plates
TITLE:
                         by direct IR-imaging process
INVENTOR(S):
                         Kawauchi, Ikuo; Nagase, Hiroyuk/
PATENT ASSIGNEE(S):
                         Fuji Photo Film Co., Ltd., Japan
                         Jpn. Kokai Tokkyo Koho, 37 pp.
SOURCE:
                         CODEN: JKXXAF
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         Japanese
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                                                    DATE
     PATENT NO.
                         KIND
                                DATE
                                             APPLICATION NO.
     JP 2004212649
                          A2
                                20040/129
                                             JP 2002-382229
                                                                    2002
                                                                    1227
PRIORITY APPLN. INFO.:
                                             JP 2002-382229
                                                                    2002
                                                                    1227
AB
     The title method includes the steps of: imagewise exposing a
     printing plate precursor having an image-forming layer
     on a support; and developing the image with an alkali developer,
     wherein the image forming layer contains a copolymer of
     CH2=C(R)(-X-COOH) (R = H, alkyl; X = arylene) and wherein the
     developer contains an anionic surfactant having sulfonium groups.
     The method uses decreased exposure energy and generates little
     residue film in the development.
IT
     188601-29-8P 604813-16-3P 604813-18-5P
     604813-19-6P 604813-23-2P
        (copolymer; light-sensitive layer of lithog. printing
        plate precursors)
RN
     188601-29-8 HCAPLUS
CN
     Benzoic acid, 4-ethenyl-, polymer with ethenylmethylbenzene (9CI)
     (CA INDEX NAME)
     CM
          1
```

CRN 25013-15-4 CMF C9 H10 CCI IDS



D1-Me

 $D1-CH = CH_2$

CM 2

CRN 1075-49-6 CMF C9 H8 O2

RN 604813-16-3 HCAPLUS
CN Benzoic acid, 4-ethenyl-, polymer with 4-ethenyl-1,1'-biphenyl
(9CI) (CA INDEX NAME)

CM 1

CRN 2350-89-2 CMF C14 H12

CM 2

CRN 1075-49-6 CMF C9 H8 O2

$$HO_2C$$
 $CH = CH_2$

RN 604813-18-5 HCAPLUS

CN Benzoic acid, 4-ethenyl-, polymer with N-(1,1-dimethylethyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 6554-73-0 CMF C8 H15 N O

CM 2

CRN 1075-49-6 CMF C9 H8 O2

RN 604813-19-6 HCAPLUS

CN Benzoic acid, 4-ethenyl-, polymer with N-(1,1-dimethyl-3-oxobutyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 2873-97-4 CMF C9 H15 N O2

$$\begin{array}{c} \text{O} \\ \text{H}_2\text{C} = \text{CH} - \text{C} - \text{NH} & \text{O} \\ \text{Me} - \text{C} - \text{CH}_2 - \text{C} - \text{Me} \\ \text{Me} \end{array}$$

CM 2

CRN 1075-49-6 CMF C9 H8 O2

$$HO_2C$$
 $CH = CH_2$

```
RN 604813-23-2 HCAPLUS
CN Benzoic acid, 4-ethenyl-, polymer with 1-bromo-4-ethenylbenzene and N-(1,1-dimethylethyl)-2-propenamide (9CI) (CA INDEX NAME)
```

CM 1

CRN 2039-82-9 CMF C8 H7 Br

CM 2

CRN 1075-49-6 CMF C9 H8 O2

CM 3

CRN 107-58-4 CMF C7 H13 N O

$$t$$
-Bunh-C-CH $=$ CH $_2$

IC ICM G03F007-00

ICS G03F007-033; G03F007-32

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35, 46

IT 146115-88-0P 188601-29-8P 604813-16-3P 604813-18-5P 604813-19-6P 604813-23-2P 604813-38-9P 604813-40-3P 604813-41-4P 604813-42-5P 604813-43-6P 604813-44-7P 604813-45-8P 604813-46-9P 604813-47-0P 604813-48-1P 604813-50-5P 604813-52-7P 604813-54-9P 604813-55-0P 604813-56-1P 604813-57-2P 604813-59-4P 604813-60-7P 604813-61-8P 604813-62-9P

604813-64-1P 604813-65-2P 604813-66-3P 604813-67-4P 722484-52-8P 722494-08-8P 722494-09-9P

(copolymer; light-sensitive layer of lithog. printing
plate precursors)

L20 ANSWER 12 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:569739 HCAPLUS

DOCUMENT NUMBER:

141:131306

TITLE:

Infrared-sensitive lithographic printing plate

Kawauchi, Ikuo; Nakamura, Ippei INVENTOR(S): PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan U.S. Pat. Appl. Publ., 25 pp. SOURCE:

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004137365	A1	20040715	US 2003-743412	
				2003
				1223
JP 2004212650	A2	20040729	JP 2002-382230	
•				2002
		•		1227
EP 1433595	A2	20040630	EP 2003-29286	
		•		2003
				1222
	-		DK, EE, ES, FI, FR,	
	•		PT, RO, SE, SI, SK,	TR .
CN 1512268	A	20040714	CN 2003-10113198	
				2003
				1226
PRIORITY APPLN. INFO.:	•		JP 2002-382230	· A
				2002
				1227

There is provided an IR-sensitive lithog. printing plate capable AB of direct plate-making based on digital data from a computer or the like, and excellent in development latitude and scratch resistance, which is an IR-sensitive lithog. printing plate comprising a support and a heat-sensitive layer, the heat-sensitive layer comprising (A) a copolymer having a specific monomer unit having a carboxyl group, (B) an alkali-soluble high mol. weight compound having a sulfonamide group, and (C) a light-heat conversion material.

IT 188601-29-8 604813-16-3 604813-18-5

604813-19-6 604813-23-2

(IR-sensitive lithog. printing plate containing)

RN 188601-29-8 HCAPLUS

Benzoic acid, 4-ethenyl-, polymer with ethenylmethylbenzene (9CI) CN (CA INDEX NAME)

CM 1

CRN 25013-15-4 CMF C9 H10 CCI IDS



D1-Me

 $D1-CH-CH_2$

CM 2

CRN 1075-49-6 CMF C9 H8 O2

CM 1 ·

CRN 2350-89-2 CMF C14 H12

CM 2

CRN 1075-49-6 CMF C9 H8 O2

RN 604813-18-5 HCAPLUS

CN Benzoic acid, 4-ethenyl-, polymer with N-(1,1-dimethylethyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 6554-73-0 CMF C8 H15 N O

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ & || & || \\ \text{t-BuNH-C-C-Me} \end{array}$$

CM 2

CRN 1075-49-6 CMF C9 H8 O2

$$_{\text{CH}=\text{CH}_{2}}^{\text{HO}_{2}\text{C}}$$

RN 604813-19-6 HCAPLUS
CN Benzoic acid, 4-ethenyl-, polymer with N-(1,1-dimethyl-3-oxobutyl)2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 2873-97-4 CMF C9 H15 N O2

CM 2

CRN 1075-49-6 CMF C9 H8 O2

$$HO_2C$$
 $CH = CH_2$

```
RN 604813-23-2 HCAPLUS
CN Benzoic acid, 4-ethenyl-, polymer with 1-bromo-4-ethenylbenzene
and N-(1,1-dimethylethyl)-2-propenamide (9CI) (CA INDEX NAME)
```

CM 1

CRN 2039-82-9 CMF C8 H7 Br

CM 2

CRN 1075-49-6 CMF C9 H8 O2

$$HO_2C$$
 $CH = CH_2$

CM 3

CRN 107-58-4 CMF C7 H13 N O

IC ICM G03F007-039

INCL 430270100; 430286100; 430302000; 101453000

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38

IT 146115-88-0 188601-29-8 604813-16-3

604813-18-5 604813-19-6 604813-23-2 604813-38-9 604813-40-3 604813-4

604813-38-9 604813-40-3 604813-41-4 604813-42-5 604813-43-6 604813-44-7 604813-45-8 604813-46-9

604813-47-0 604813-48-1 604813-50-5 604813-52-7

604813-54-9 604813-55-0 604813-56-1 604813-57-2

604813-59-4 604813-60-7 604813-61-8 604813-62-9

604813-64-1 604813-65-2 604813-66-3 604813-67-4

722484-52-8 722494-08-8 722494-09-9

(IR-sensitive lithog. printing plate containing)

```
L20 ANSWER 13 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
                          2004:305152 HCAPLUS
DOCUMENT NUMBER:
                          140:347531
TITLE:
                          Photosensitive lithographic printing plate
                          precursor
INVENTOR(S):
                          Kondo, Shunichi
PATENT ASSIGNEE(S):
                          Fuji Photo Film Co., Ltd., Japan
                          Eur. Pat. Appl., 33 pp.
SOURCE:
                          CODEN: EPXXDW
DOCUMENT TYPE:
                          Patent
                          English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                                 DATE
                          KIND
                                              APPLICATION NO.
                                                                      DATE
     EP 1407894
                           A2
                                 20040414
                                              EP 2003-22901
                                                                       2003
                                                                      1009
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
             MC, PT, IE, SI, LT, LV, 7, RO, MK, CY, AL, TR, BG, CZ,
             EE, HU, SK
     JP 2004133125
                           A2
                                 2004/0430
                                              JP 2002-296404
                                                                       2002
                                                                      1009
PRIORITY APPLN. INFO.:
                                              JP 2002-296404
                                                                       2002
                                                                      1009
     A photosensitive lithog. printing plate precursor
AB
     comprises an aluminum support having provided thereon an
     intermediate layer and a photopolymerizable photosensitive layer
     in this order, wherein the intermediate layer comprises a
     copolymer containing a constituting component having an acid group and
     a constituting component capable of reacting with an alkali
     developing solution to increase the dissoln. rate in the alkali developing solution the object of the invention is to provide a
     photosensitive lithog. printing plate which has a high
     preservation stability and is prevented from the occurrence of
     background stain by/conducting imagewise exposure, development and
     printing even after the preservation under high temperature and high
     humidity conditions for a long period of time after the production
IT
     679796-25-9
        (photosensitive lithog. printing plate
        precursor)
RN
     679796-25-9 HCAPLUS
     Benzoic acid, 4-ethenyl-, polymer with ethoxymethyl 2-propenoate
CN
            (CA INDEX NAME)
     CM
          1
     CRN 101181-06-0
     CMF C6 H10 O3
```

Eto-CH2-O-C-CH=CH2

```
CM 2
```

CRN 1075-49-6 CMF C9 H8 O2

```
HO<sub>2</sub>C CH CH<sub>2</sub>
```

```
IC ICM B41N003-03
```

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST photosensitive lithog printing plate precursor

IT Lithographic plates

(photosensitive lithog. printing plate precursor)

IT 3524-68-3 51821-72-8, Isobutyl methacrylate-methacrylic acid-methyl methacrylate copolymer 80937-22-0 90216-38-9, Allyl methacrylate-methacrylic acid copolymer 161255-05-6, Isopropylacrylamide-methacrylic acid-methyl/methacrylate copolymer 293329-29-0 461660-75-3 485385-86-2 679796-25-9

(photosensitive lithog. printing plate
precursor)

L20 ANSWER 14 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:291555 HCAPL/US

DOCUMENT NUMBER:

140:329560

TITLE:

Method of plate making positive-working

lithographic printing plate Aogo, Toshiaki, Onishi, Hiroaki

INVENTOR(S):
PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 30 pp.

SOORCE.

SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE:

LANGUAGE:

Patent Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND / DATE	APPLICATION NO.	DATE
	/		
JP 2004109442	A 2/ 20040408	JP 2002-271435	
	/		2002
			0918
PRIORITY APPLN. INFO.:	/	JP 2002-271435	
			2002
	/		0918

The pos.-working ithog. printing master plate contains an IR absorbing dye and a water-insol. and alkali-soluble resin in a heat-sensitive layer on a water-insol. resinand alkali-soluble resin-based subbing layer formed on the hydrophilic surface of support, in which the solubility of the heat sensitive layer in an alkali aqueous solution increases upon receiving an IR irradiation The pos.-working lithog.

```
printing master plate receives an IR imagewise exposure, and is
     developed using an alkali developer which contains ≥1
     water-soluble polymer compound having sulfonic acid group, carboxylic
     acid group, phosphonic acid group, and /or salt thereof, a buffer
     compound, and a base compound
     28391-39-1
IT
        (developer for plate-making of pos.-working lithog.
        printing plate)
     28391-39-1 HCAPLUS
RN
     Benzoic acid, 4-ethenyl-, homopolymer (9CI) (CA INDEX NAME)
CN
     CM
          1
         1075-49-6
     CRN
     CMF C9 H8 O2
HO<sub>2</sub>C
             CH = CH_2
IC.
     ICM G03F007-32
     ICS G03F007-00; G03F007-004
     74-6 (Radiation Chemistry, Photochemistry, and Photographic and
CC
     Other Reprographic Processes)
     Section cross-reference(s): 38
IT
     25087-26-7, Methacrylic acid homopolymer
                                                 25300-64-5, Maleic
                              27754-99-0 28391-39-1
     acid-styrene copolymer
     54640-82-3
                83328-59-0
        (developer for plate-making of pos.-working lithog.
        printing plate)
L20 ANSWER 15 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN
                         2004:260987 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         140:294816
TITLE:
                         Infrared sensitive composition and
                         lithographic printing plate precursor
INVENTOR(S):
                         Endo, Akihiro
PATENT ASSIGNEE(S):
                         Fuji Photo Film Co., Ltd., Japan
SOURCE:
                         Eur. Pat. Appl., 26 pp.
                         CODEN: EPXXDW
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                         KIND
                               DATE
                                             APPLICATION NO.
                                                                    DATE
     EP 1403039
                          A1
                                2004/0331
                                             EP 2003-20590
                                                                     2003
                                                                     0918
            AT, BE, CH, DE, DK, SS, FR, GB, GR, IT, LI, LU, NL, SE,
             MC, PT, IE, SI, LT,/LV, FI, RO, MK, CY, AL, TR, BG, CZ,
             EE, HU, SK
     JP 2004125851
                                20040422
                                             JP 2002-285697
                          A2
                                                                     2002
```

USHA SHRESTHA EIC 1700 REM 4B28

0930 US 2003-673 20040401 US 2004063029 Α1 2003 0930 CN 1497346 20040519 CN 2003 2003 0930 PRIORITY APPLN. INFO.: JP 2Ø02-285697 2002 0930 OTHER SOURCE(S): MARPAT 140:294816 $R^{1} R^{2} Y R^{3} R^{4}$ | | | | | | | | | | | $Ar^{1}-(C=C)_{m}-C-(C=C)_{n}-$

An IR sensitive composition and a lithog. printing plate precursor having a large difference in alkali solubility between the exposed portions and unexposed portions (dissoln. discrimination), an excellent latitude in development, and a high sensitivity can be provided when the composition is used for the image-forming layer of a lithog. printing plate precursor, which is an IR sensitive composition comprising an alkali-soluble resin having a phenolic hydroxyl group (A), a light-heat converting substance (B) and a leucohydroxy dye (C). The leucohydroxy dye is represented by the general formula I (Ar1, Ar2 = aryl, heteroaryl; R1-R4 = H, alkyl; Y = H, alkyl, aryl, heteroaryl; at least one of Ar1, Ar2 and Y has as a substituent a hydroxy group, an amino group, a monoalkylamino group or a dialkylamino group at the ortho or para position; two of Ar1, Ar2 and Y may link together to from a ring; m, n = 0 or 1).

IT 220227-02-1

(IR sensitive composition and lithog. printing plate precursor)

RN 220227-02-1 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-triethyl-, chloride, polymer with 4-ethenylbenzoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 14350-43-7 CMF C15 H24 N . Cl

● cl-

CM 2

CRN 1075-49-6 CMF C9 H8 O2

IC ICM B41C001-10

ICS G03F007-004; G03C001-73

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST lithog printing plate precursor IR sensitive compn

IT Lithographic plates

(IR sensitive composition and lithog. printing plate precursor)

IT 467-63-0 510-13-4 603-48-5 6948-88-5 23705-78-4 103250-84-6, m-Cresol-p-cresol-phenol copolymer 220227-02-1 676259-57-7

(IR sensitive composition and **lithog.** printing plate **precursor**)

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 16 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2003:671500 HCAPLUS

DOCUMENT NUMBER:

139:188366

TITLE:

SOURCE:

Positive-working heat

sensitive lithography printing plate

with high development latitude

INVENTOR(S):

Watanabe, Noriaki

PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 26 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.

KIND DATE

APPLICATION NO.

DATE

			/-	
JP 2003241388	A2	20030827	JP 2002-43565 /	
				2002
			<i>f</i>	0220
US 2003183106	A1	20031002	US 2003-364400	
				2003
				0212
US 6849380	B2	20050201	· /	
PRIORITY APPLN. INFO.:			JP 2002,43565 A	
				2002
•				0220
			/	

AB Title printing plate is obtained by laminating an aluminum substrate, which has been subjected to anode oxidative treatment, an undercoat comprising polymer having acid group-containing components and onium group-containing components, a middle layer comprising a resin which is water-insol. but soluble in alkali, and a heat-sensitive layer which comprises a water-insol. but alkali-soluble resin and an IR-absorbing dye and becomes more soluble in aqueous alkali upon heating.

IT 220227-02-1 252721-97-4 252721-98-5

(undercoat; pos.-working heat sensitive

lithog. printing plate with high development latitude)

RN 220227-02-1 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-triethyl-, chloride, polymer with 4-ethenylbenzoic acid/(9CI) (CA INDEX NAME)

CM 1

CRN 14350-43-7 CMF C15 H24 N . Cl

CM 2

CRN 1075-49-6 CMF C9 H8 O2

RN 252721-97-4 HCAPLUS

CN Benzenemethanaminium, 3-ethenyl-N,N,N-triethyl-, chloride, polymer with 4-ethenylbenzoic acid and 4-ethenyl-N,N,N-triethylbenzenemethanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 91277-26-8 CMF C15 H24 N . Cl

● cl -

CM 2

CRN 14350-43-7 CMF C15 H24 N . Cl

$$Et_3+N-CH_2$$
 $CH=CH_2$

• c1-

CM 3

CRN 1075-49-6 CMF C9 H8 O2

$$HO_2C$$
 $CH = CH_2$

RN 252721-98-5 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with 4-ethenylbenzoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 7538-38-7 CMF C12 H18 N . Cl

$$Me_3+N-CH_2$$
 $CH=CH_2$

Cl-

CM 2

CRN 1075-49-6 CMF C9 H8 O2

IC ICM G03F007-11

ICS B41N001-14; G03F007-00; G03F007-004; G03F007-039

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

pos working heat sensitive lithog printing stplate

ITPhenolic resins, uses

(novolak, middle layer and heat-sensitive layer; pos.-working heat sensitive lithog. printing plate with high development latitude)

IT Lithographic plates

(planog.; pos.-working heat sensitive

lithog. printing plate with high development latitude)

IT

(IR-absorbing dye; pos.-working heat

sensitive lithog. printing plate with high development latitude)

IT 7429-90-5, Aluminum, uses

(alloy; pos.-working heat sensitive lithog. printing plate with high development latitude)

27029-76-1, m-Cresol-p-cresol-formaldehyde copolymer (middle layer and heat-sensitive layer;

pos.-working heat sensitive lithog.

printing plate with high development latitude)

IT 141634-00-6

IT

(middle layer; pos.-working heat sensitive

lithog. printing plate with high development latitude)

ΪT 220227-02-1 252721-97-4 252721-98-5

(undercoat; pos.-working heat sensitive

lithog. printing plate with high development latitude)

```
L20 ANSWER 17 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN
                         2003:299303 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         138:329007
TITLE:
                         Presensitized lithography plates for IR laser
                         direct platemaking with suppressed scum
INVENTOR(S):
                         Kawauchi, Ikuo
PATENT ASSIGNEE(S):
                         Fuji Photo Film Co., Ltd., Japán
SOURCE:
                         Jpn. Kokai Tokkyo Koho, 17 pp.
                         CODEN: JKXXAF
DOCUMENT TYPE:
                         Patent
                         Japanese
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                                            APPLICATION NO.
                                                                    DATE
                         KIND
                                DATE
                                20030418/
                                            JP 2001-309942
     JP 2003114519
                          A2
                                                                    2001
                                                                    1005
PRIORITY APPLN. INFO.:
                                            JP 2001-309942
                                                                    2001
                                                                    1005
AB
     The lithog. plate has a heat-sensitive layer
     containing (A) photothermal converters, (B) aqueous alkali-soluble resins
     bearing phenolic OH, and/(C) waxes which suppress scum on
     developing, represented by compds. bearing 1-6 groups represented
     by general formula R1Y\phiOXR2 (X = O, S, NR3; Y = NR3, single bond;
     R1 = C1-32 alkylene; arylene; R2, R3 = H, C1-18 alkyl, alkenyl,
     aryl; R1 and/or R2 may bear OH, CO2H, SO3H, sulfinic acid group,
     PO3H2, phosphonic agid group).
     216861-97-1
IT
        (undercoat; presensitized lithog. plates with
        wax-containing heat-sensitive layer for IR
        laser direct/platemaking with suppressed scum)
RN
     216861-97-1 HCAPLUS
CN
     Benzenemethan Aminium, ar-ethenyl-N, N, N-triethyl-, chloride,
     polymer with/4-ethenylbenzoic acid (9CI) (CA INDEX NAME)
     CM
         51241-16-8
     CRN
     CMF C15 H24 N . Cl
     CCI IDS
```



D1- CH CH2

Et3+N-CH2-D1

● cl-

CM 2

CRN 1075-49-6 CMF C9 H8 O2

IC ICM G03F007-00

ICS C09K003-00; G03F007-004

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) Section cross-reference(s): 38

ST lithog plate IR laser direct platemaking; wax novolak heat sensitive layer lithog; presensitized lithog plate heat sensitive layer wax; pos IR laser lithog plate master

IT Polyurethanes, uses

(acrylic, fluorine-containing; presensitized lithog. plates with wax-containing heat-sensitive layer for IR

laser direct platemaking with suppressed scum)

IT Fluoropolymers, uses

(acrylic-polyurethane-; presensitized lithog. plates with wax-containing heat-sensitive layer for IR

laser direct platemaking with suppressed scum)

IT Phenolic resins, uses

(novolak, heat-sensitive layer binder; presensitized lithog. plates with wax-containing heat-sensitive layer for IR laser direct platemaking with suppressed scum)

IT Cyanine dyes

(photothermal converter; presensitized lithog. plates with wax-containing heat-sensitive layer for IR laser direct platemaking with suppressed scum)

IT Acrylic polymers, uses

(polyoxyalkylene-, fluorine-containing, graft; presensitized lithog. plates with wax-containing heat-sensitive layer for IR laser direct platemaking with suppressed scum)

IT Lithographic plates

(presensitized; presensitized lithog. plates with wax-containing heat-sensitive layer for IR laser direct

platemaking with suppressed scum)

IT 63-74-1, p-Aminobenzenesulfonamide 79-41-4, Methacrylic acid, reactions

(monomer preparation from; presensitized lithog. plates with wax-containing heat-sensitive layer for IR laser direct platemaking with suppressed scum)

IT 134127-48-3

(photothermal converter; presensitized lithog. plates with wax-containing heat-sensitive layer for IR laser direct platemaking with suppressed scum)

IT 124996-93-6P, Acrylonitrile-(p-aminosulfonylphenyl)methacrylamideethyl methacrylate copolymer

(presensitized lithog. plates with wax-containing heatsensitive layer for IR laser direct platemaking with suppressed scum)

451462-65-0 511531-81-0 IT 83563-92-2 92739-54-3 511531-82-1 511531-83-2 511531-84-3 511531-85-4 511531-86-5 511531-87-6 511531-88-7 511531-89-8 511531-90-1 511531-91-2 511531-92-3 511531-93-4 511531-94-5 511531-96-7

> (presensitized lithog. plates with wax-containing heatsensitive layer for IR laser direct platemaking with suppressed scum)

IT 216861-97-1

(undercoat; presensitized lithog. plates with wax-containing heat-sensitive layer for IR laser direct platemaking with suppressed scum)

L20 ANSWER 18 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2002:429453 HCAPLUS

DOCUMENT NUMBER:

137:26109

TITLE:
INVENTOR(S):

Lithographic printing plate precursor Oohashi, Hidekazu; Shimada, Kazuto Fuji Photo Film Co., Ltd., Japan

PATENT ASSIGNEE(S): SOURCE:

U.S. Pat. Appl. Publ., 76 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002068241	A1	20020606	US 2001-964611	2001 0928
US 6824946 JP 2002107929	B2 A2	20041130 20020410	JP 2000-303953	2000



77. 00007.4.550		20020522	TD 0000 340715	1003
JP 2002144750	A2	20020522	JP 2000-349715	2000
				1116
JP 2002174895	A2	20020621	JP 2000-374529	2000
			•	1208
JP 2002174893	A2	20020621	JP 2000-374530	
				2000 1208
US 2004086799	A1	20040506	US 2003-727633	1200
				2003
US 6939658	B2	20050906		1205
PRIORITY APPLN. INFO.:	22	20030300	JP 2000-303953	Α
				2000
				1003
			JP 2000-349715	A
				2000 [°] 1116
				1110
			JP 2000-374529	A
				2000 1208
				2200
			JP 2000-374530	A 2000
				1208
			US 2001-964611	A3 2001
				0928

GI

AB A lithog. printing plate precursor comprises a support having a hydrophilic surface having provided thereon an image-forming layer containing a hydrophobic high mol. compound having at least either a functional group represented by the formula I or a functional group represented by the formula II (X+ = iodonium, sulfonium, or diazonium ions). The present invention provides a lithog. printing plate precursor which has high sensitivity and causes no stains due to residual films, and is capable of plate-making by scanning exposure with a solid state laser and a semiconductor laser emitting IR rays based on digital signals. The present invention also provides a lithog. printing plate precursor which can be developed by water or an aqueous solution, or can be mounted on a printing machine to perform

printing requiring no development.

IT 433922-49-7

(lithog. printing plate precursor)

RN 433922-49-7 HCAPLUS

CN Iodonium, bis[4-(1,1-dimethylpropyl)phenyl]-, salt with 4-ethenylbenzoic acid (1:1), polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 2

CRN 433922-48-6 CMF C22 H30 I . C9 H7 O2

CM 3

CRN 249300-51-4 CMF C22 H30 I

CM 4

CRN 74056-33-0 CMF C9 H7 O2

IC ICM G03F007-021

ICS G03F007-28; G03F007-033; G03F007-038; B41N001-12

INCL 430288100

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST lithog printing plate precursor IR laser exposable

IT Lithographic plates

(lithog. printing plate precursor)

```
361542-00-9 427883-12-3
TТ
    134127-48-3
                  289893-03-4
     427898-71-3
        (IR-absorber dye; lithog. printing plate precursor)
     496-16-2 52858-60-3 56992-88-2 57758-90-4 150610-19-8
                  427883-14-5
                                427883-16-7
                                              433922-47-5
     215958-19-3
     433922-49-7
                  433922-51-1
                                 433922-54-4
                                              433922-55-5
     433922-56-6
        (lithog. printing plate precursor)
                               THERE ARE 5 CITED REFERENCES AVAILABLE
REFERENCE COUNT:
                               FOR THIS RECORD. ALL CITATIONS AVAILABLE
                               IN THE RE FORMAT
L20 ANSWER 19 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
                       2002:286047 HCAPLUS
DOCUMENT NUMBER:
                        136:316957
TITLE:
                        Lithographic printing plate precursor
                        having hydrophilic layer and recording layer
                        containing polymer of heat-
                        sensitive carboxyl groups
                        Takahashi, Miki; Yamazaki, Sumiaki
INVENTOR(S):
                        Fuji Photo Film Co., Ltd., Japan
PATENT ASSIGNEE(S):
                        Jpn. Kokai Tokkyo Koho, 25 pp.
SOURCE:
                        CODEN: JKXXAF
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        Japanese
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
    PATENT NO.
                        KIND
                               DATE
                                           APPLICATION NO.
                                                                   DATE
    JP 2002113964
                         A2
                                20020416
                                           JP 2000-309357
                                                                   2000
                                                                   1010
PRIORITY APPLN. INFO.:
                                           JP 2000-309357
                                                                   2000
                                                                   1010
AB
    The title lithog. printing plate precursor has a
    hydrophilic layer and a recording layer on a support, wherein the
    recording layer contains a polymer having a carboxylic acid group
    or a carboxylate group to be decomposed by heat and wherein the
    hydrophilic layer is connected to the support by covalent bonds
    and contains a polymer having hydrophilic groups. The printing
    plate precursor shows the good contact of printing layer
    with the support, the reduced heat diffusion in the aluminum
     support to write images with the low energy and provides the
    printing plate of little soiling and the good printing durability.
IT
    265316-27-6 265316-79-8
        (polymer in recording layer of lithog. printing plate
       precursor)
     265316-27-6 HCAPLUS
RN
CN
    Acetic acid, [(4-ethenylphenyl)sulfonyl]-, homopolymer (9CI) (CA
    INDEX NAME)
    CM
         1
    CRN 103945-08-0
```

CMF C10 H10 O4 S

$$HO_2C-CH_2-S$$
 O
 CH
 CH

RN 265316-79-8 HCAPLUS

CN Acetic acid, [(4-ethenylphenyl)sulfonyl]-, sodium salt, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 265316-78-7 CMF C10 H10 O4 S . Na

$$\begin{array}{c|c} CH = CH_2 \\ \hline \\ HO_2C - CH_2 - S \\ \hline \\ O \end{array}$$

Na

IC ICM B41N001-14

ICS G03F007-00; G03F007-004; G03F007-039; G03F007-11

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and
Other Reprographic Processes)
Section cross-reference(s): 35

ST lithog printing plate **precursor** hydrophilic layer recording polymer

IT Lithographic plates

(lithog. printing plate precursor having hydrophilic layer and recording layer containing polymer of heat-sensitive carboxylic groups on support)

L20 ANSWER 20 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:265350 HCAPLUS

DOCUMENT NUMBER: 136:316944

TITLE: Lithographic plate precursors for

scanning exposure by IR laser

Ohashi, Hidekazu

Fuji Photo Film Co., Ltd., Japan PATENT ASSIGNEE(S): Jpn. Kokai Tokkyo Koho, 27 pp. SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

INVENTOR(S):

Japanese

FAMILY ACC. NUM. COUNT:

3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	_	DATE
JP 2002107929	A2	20020410	JP 2000-303953		2000
US 2002068241	A1	20020606	US 2001-964611		1003 2001 0928
US 6824946 US 2004086799	B2 A1	20041130 20040506	US 2003/727633		2003
US 6939658 PRIORITY APPLN. INFO.:	В2	20050906	JP 2000-303953	A	2000
			JP 2000-349715	A	2000
			JP 2000-374529	Α	1116
			TD 2000 274520	70	2000 1208
			JP 2000-374530	Α	2000 1208
			US 2001-964611	A3	2001 0928

The title lithog. plate has an image-forming layer containing a AΒ hydrophobic polymer on a support with a hydrophilic surface, wherein the hydrophobic polymer has functional group -S(=0)20- X+ and -C(=0)0-X+(X+=iodonium, sulfonium, diazonium). The lithog. plate precursor shows the high sensitivity and provides printing plates of little soiling caused by residual light-sensitive layers during the plate making.

IT 28854-56-0P

> (hydrophobic polymer in lithog. plate precursors)

RN 28854-56-0 HCAPLUS

Benzoic acid, 4-ethenyl-, polymer with ethenylbenzene (9CI) INDEX NAME)

CM 1 CRN 1075-49-6 CMF C9 H8 O2

CM 2

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

IT

IT

IC ICM G03F007-038

ICS B41N001-14; G03F007-00

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and
Other Reprographic Processes)
Section cross-reference(s): 35

ST lithog plate precursor scanning exposure IR laser

IT Light-sensitive materials

Lithographic plates

(lithog. plate **precursors** for scanning exposure by IR laser)

TT 75-03-6, Ethyl iodide 945-51-7, Diphenyl sulfoxide 2049-95-8, tert-Amylbenzene 7758-05-6, Potassium iodate 12027-06-4, Ammonium iodide 16600-92-3, 2-Nitro-1,3,5-benzenetriol

(hydrophobic polymer in lithog. plate **precursors**) 3744-08-9P, Triphenylsulfonium iodide 215253-66-0P,

Benzenediazonium, 2, 4, 6-triethoxy- 220476-27-7P, 2-Nitro-1, 3, 5-triethoxybenzene 220476-28-8P,

2,4,6-Triethoxyaniline hydrochloride 365971-60-4P,

Todonium, bis [4-(1,1-dimethylpropyl) phenyl] -, iodide

(hydrophobic polymer in lithog. plate **precursors**) 25085-34-1P 27234-22-6P **28854-56-0P** 259263-07-5DP,

Styrene-Cyclohexyl p-styrenesulfonate copolymer, hydrolyzed, salt with iodonium, sulfonium, or diazonium 264871-12-7P

409350-26-1P (hydrophobic polymer in **lithog.** plate

L20 ANSWER 21 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:219919 HCAPLUS

DOCUMENT NUMBER: 136:239137

TITLE: Thermal positive-type lithographic plate using

anodized aluminum support

INVENTOR(S):
Endo, Tadashi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 36 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

precursors)

PATENT INFORMATION:

PATENT NO.		KIND	DATE	APPLICATION NO.	DATE
JP 20020824	43	A2	20020322	JP 2000-272895	
					2000
•					0908
PRIORITY APPLN. INFO.:	INFO.:			JP 2000-272895	
					2000
					0908

AB In the material comprising a coarsened and anodized Al support coated with a photosensitive layer whose solubility to an alkaline developer changes by heating, the anodized film has micropores with average size ≤ 20 nm and d. ≥ 300 number/ μ m2. The material shows high sensitivity.

214279-68-2P, p-Vinylbenzoic acidvinylbenzyltrimethylammonium chloride copolymer
220227-02-1P, Triethyl(p-vinylbenzyl)ammonium
chloride-p-vinylbenzoic acid copolymer 252721-97-4P,
Triethyl(m-vinylbenzyl)ammonium chloride-triethyl(pvinylbenzyl)ammonium chloride-p-vinylbenzoic acid copolymer
 (intermediate layer; heat-sensitive
 lithog. plate using anodized aluminum support with
 size-controlled micropores)

RN 214279-68-2 HCAPLUS

CN Benzenemethanaminium, ar-ethenyl-N,N,N-trimethyl-, chloride, polymer with 4-ethenylbenzoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 26616-35-3 CMF C12 H18 N . Cl CCI IDS



D1-CH-CH2

 Me_3+N-CH_2-D1

• cl -

CM 2

CRN 1075-49-6 CMF C9 H8 O2

$$HO_2C$$
 $CH = CH_2$

RN 220227-02-1 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-triethyl-, chloride, polymer with 4-ethenylbenzoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 14350-43-7 CMF C15 H24 N . Cl

● Cl -

CM 2

CRN 1075-49-6 CMF C9 H8 O2

RN 252721-97-4 HCAPLUS

CN Benzenemethanaminium, 3-ethenyl-N,N,N-triethyl-, chloride, polymer with 4-ethenylbenzoic acid and 4-ethenyl-N,N,N-triethylbenzenemethanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 91277-26-8 CMF C15 H24 N . Cl

• c1-

CM 2

CRN 14350-43-7 CMF C15 H24 N . Cl

$$Et_3+N-CH_2$$
 $CH=CH_2$

C1 =

CM 3

CRN 1075-49-6 CMF C9 H8 O2

IC ICM G03F007-09

ICS B41N001-08; B41N001-14; B41N003-03; C25D011-04; C25D011-16; G03F007-00

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT Anodization

Lithographic plates

(heat-sensitive lithog. plate using

anodized aluminum support with size-controlled micropores)

IT Phenolic resins, uses

(heat-sensitive lithog. plate using

anodized aluminum support with size-controlled micropores)

IT 62200-40-2

(heat-sensitive lithog. plate using anodized aluminum support with size-controlled micropores)

```
214279-68-2P, p-Vinylbenzoic acid-
     vinylbenzyltrimethylammonium chloride copolymer
     220227-02-1P, Triethyl (p-vinylbenzyl) ammonium
     chloride-p-vinylbenzoic acid copolymer 252721-97-4P,
     Triethyl (m-vinylbenzyl) ammonium chloride-triethyl (p-
     vinylbenzyl)ammonium chloride-p-vinylbenzoic acid copolymer
        (intermediate layer; heat-sensitive
        lithog, plate using anodized aluminum support with
        size-controlled micropores)
     124996-93-6P, Acrylonitrile-N-(p-aminosulfonylphenyl) methacrylamid
IT
     e-ethyl methacrylate copolymer
        (photosensitive layer; heat-sensitive
        lithog. plate using anodized aluminum support with
        size-controlled micropores)
     27029-76-1, m-Cresol-p-cresol-formaldehyde copolymer
ΙT
        (photosensitive layer; heat-sensitive
        lithog. plate using anodized aluminum support with
        size-controlled micropores)
L20 ANSWER 22 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
                        2002:61464 HCAPLUS
DOCUMENT NUMBER:
                        136:126583
TITLE:
                        Lithographic printing original plates with
                        high printability
                         Taninaka, Hiromitsu; Yamazaki, Sumiaki
INVENTOR(S):
PATENT ASSIGNEE(S):
                         Fuji Photo Film Co., Ltd., Japan
                         Jpn. Kokai Tokkyo Koho, 26 pp.
SOURCE:
                         CODEN: JKXXAF
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         Japanese
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                       KIND DATE
                                          APPLICATION NO.
                                                                   DATE
     JP 2002019317
                        A2
                                20020123
                                           JP 2000-206906
                                                                   2000
                                                                   0707
PRIORITY APPLN. INFO.:
                                            JP 2000-206906
                                                                   2000
                                                                   0707
OTHER SOURCE(S):
                        MARPAT 136:126583
     In the original plates having heat-sensitive
     layers containing ≥1 components selected from thermoplastic
    polymer fine particles, thermosetting polymer fine particles,
    polymer fine particles having heat-reactive functional groups, and
    microcapsules containing hydrophilic compds. on hydrophilic supports,
     the heat-sensitive layers contain hydrophilic
    polymers which become hydrophobic by heat. Water-soluble overcoat
     layers may contain the hydrophilic polymers. The original plates
     are suitable for scanning exposure based on digital signals and
     show good on-press developability.
IT
     265316-79-8 265316-83-4 265316-84-5
     265316-86-7 390801-06-6
        (on-press developable lithog. original plates having
       heat-sensitive hydrophilic polymer layers)
```

Acetic acid, [(4-ethenylphenyl)sulfonyl]-, sodium salt,

RN

CN

265316-79-8 HCAPLUS

homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 265316-78-7 CMF C10 H10 O4 S . Na

$$\begin{array}{c|c} CH = CH_2 \\ \hline \\ HO_2C - CH_2 - S \\ \hline \\ 0 \end{array}$$

Na

RN 265316-83-4 HCAPLUS

CN Methanaminium, N,N,N-trimethyl-, salt with [(4ethenylphenyl)sulfonyl]acetic acid (1:1), homopolymer (9CI) (CA
INDEX NAME)

CM 1

CRN 265316-82-3 CMF C10 H9 O4 S

$$-O_2C-CH_2-S$$

$$0$$

$$0$$

$$0$$

$$0$$

$$0$$

$$0$$

$$0$$

CM 2

CRN 51-92-3 CMF C4 H12 N

$$^{\text{CH}_3}_{\text{H}_3\text{C}-\text{N}^+-\text{CH}_3}_{\text{CH}_3}$$

RN 265316-84-5 HCAPLUS

CN 1-Butanaminium, N,N,N-tributyl-, salt with [(4-ethenylphenyl)sulfonyl]acetic acid (1:1), homopolymer (9CI) (CFINDEX NAME)

CM 1

CRN 265316-82-3 CMF C10 H9 O4 S

$$-o_2C-CH_2-S$$

CM 2

CRN 10549-76-5 CMF C16 H36 N

RN 265316-86-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-[(carboxymethyl)sulfonyl]propyl ester, sodium salt, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 265316-85-6 CMF C9 H14 O6 S . Na

Na

RN 390801-06-6 HCAPLUS

CN 2-Propenoic acid, 2-hydroxyethyl ester, polymer with sodium [(4-ethenylphenyl)sulfonyl]acetate (9CI) (CA INDEX NAME)

CM 1

CRN 265316-78-7 CMF C10 H10 O4 S . Na

$$\begin{array}{c|c} CH = CH_2 \\ \hline \\ HO_2C - CH_2 - S \\ \hline \\ O \end{array}$$

• Na

CM 2

CRN 818-61-1 CMF C5 H8 O3

IC ICM B41N001-14

ICS G03F007-00; G03F007-004; G03F007-039; G03F007-11

- CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST lithog original plate heat sensitive
 hydrophilic polymer; printability lithog original plate
 hydrophilic polymer; developability onpress lithog original plate
 hydrophilic polymer

IT Polyesters, preparation

(fine particles; on-press developable lithog. original plates having heat-sensitive hydrophilic polymer layers)

IT Lithographic plates

(on-press developable lithog. original plates having heat-sensitive hydrophilic polymer layers)

- IT 390801-07-7P 390801-08-8P, Takenate D 110N-Epikote 1004-PVA 217EE copolymer 390801-09-9P, Epikote 1004-PVA 217EE-trimethylolpropane-xylylene diisocyanate adduct copolymy
 - 217EE-trimethylolpropane-xylylene diisocyanate adduct copolymer (fine particles; on-press developable lithog. original plates having heat-sensitive hydrophilic polymer layers)

IT 9003-53-6, Polystyrene

(fine particles; on-press developable lithog. original plates having **heat-sensitive** hydrophilic polymer layers)

IT 265316-79-8 265316-83-4 265316-84-5 265316-86-7 265316-90-3 265316-98-1

390801-06-6

(on-press developable lithog. original plates having heat-sensitive hydrophilic polymer layers)

IT 37321-70-3, JIS A 1050

(supports; on-press developable lithog. original plates having heat-sensitive hydrophilic polymer layers)

L20 ANSWER 23 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002

2002:35841 HCAPLUS

DOCUMENT NUMBER:

INVENTOR(S):

136:103176

TITLE:

Photo-sensitive polybenzoxazole

precursor resins and

alkali-developable compositions useful for lithographic patterning containing them Kaneda, Takayuki; Kimura, Masashi; Kanaya,

Ryuichiro

PATENT ASSIGNEE(S):

Asahi Chemical Industry Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 21 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002012665	A2	20020115	JP 2000-335097	
				2000 1101
PRIORITY APPLN. INFO.:			JP 2000-130480 A	2000

- AB The resins are obtained from the reaction products of a polyamide bearing OH groups partially with OCN(CH2)mOCOC(R1):CR2R3 (R1-3 = H, C1-3 aliphatic groups; m = 2-10), and used in compns. containing photoinitiators, crosslinkers and diluents for neg.-working photoresists in patterning of semiconductor devices. Thus, condensing 2,2-bis(3-amino-4-hydroxyphenyl)hexafluoropropane with 4,4'-diphenyl ether dicarboxylic acid dichloride, end-blocking the resulting polyamide with phthalic anhydride, purifying, and reacting the blocked product with 2-isocyanatoethyl methacrylate (at an amount equivalent to 40 mol% of OH groups on the product) gave a polybenzoxazole precursor 100 parts of which was combined with tetraethylene glycol dimethacrylate 40, 1-phenyl-propanedione-2-(o-benzoyl) oxime 6, Michler's ketone 2, 3-aminopropyltrimethoxysilane 6, N-nitrosodiphenylamine 0.1 and N-methyl-2-pyrrolidone 230 parts to give a neg.-working photoresist with good light curability and developing property by alkali.
- 389104-92-1DP, 2,2-Bis(3-amino-4hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer 2-isocyanatoethyl methacrylate ester-tetraethylene glycol dimethacrylate copolymer, reaction products with termination acids 389104-92-1P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer 2-isocyanatoethyl methacrylate ester-tetraethylene glycol dimethacrylate copolymer 389104-93-2DP, 2,2-Bis(3-amino-4hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer 2-isocyanatoethyl methacrylate ester-N,N'-di(2-methacryloxyethyl)urea copolymer, reaction products with termination acids 389104-94-3P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer 2-isocyanatoethyl methacrylate ester-N, N'-di(2-methacryloxyethyl)urea-tetraethylene

glycol dimethacrylate copolymer
(photo-sensitive polybenzoxazole precursor resins and alkali-developable compns. useful for lithog. patterning containing them)
389104-92-1 HCAPLUS

2-Propenoic acid, 2-methyl-, oxybis(2,1-ethanediyloxy-2,1-ethanediyl) ester, polymer with 4,4'-oxybis[benzoyl chloride] polymer with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[2-aminophenol] [2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate (9CI) (CA INDEX NAME)

CM 1

RN

CN

CRN 109-17-1 CMF C16 H26 O7

PAGE 1-B

— Ме

CM 2

CRN 389104-91-0 CMF (C15 H12 F6 N2 O2 . C14 H8 Cl2 O3)x . x C7 H11 N O4

CM 3

CRN 96571-20-9 CMF C7 H11 N O4

 $\begin{array}{c|c} & \circ & \text{CH}_2 \\ || & || \\ \text{HO}_2\text{C-NH-CH}_2\text{-CH}_2\text{-O-C-C-Me} \end{array}$

CM 4

CRN 133440-72-9

CMF (C15 H12 F6 N2 O2 . C14 H8 Cl2 O3) \times

CCI PMS

CM 5

CRN 83558-87-6 CMF C15 H12 F6 N2 O2

USHA SHRESTHA EIC 1700 REM 4B28

CM 6

CRN 7158-32-9 CMF C14 H8 Cl2 O3

RN 389104-92-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, oxybis(2,1-ethanediyloxy-2,1-ethanediyl) ester, polymer with 4,4'-oxybis[benzoyl chloride] polymer with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]b is[2-aminophenol] [2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate (9CI) (CA INDEX NAME)

CM 1

CRN 109-17-1 CMF C16 H26 O7

PAGE 1-B

— Ме

CM 2

CRN 389104-91-0 CMF (C15 H12 F6 N2 O2 . C14 H8 Cl2 O3)x . x C7 H11 N O4

CM 3

CRN 96571-20-9 CMF C7 H11 N O4

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ || & || \\ \text{HO}_2\text{C} - \text{NH} - \text{CH}_2 - \text{CH}_2 - \text{O} - \text{C} - \text{C} - \text{Me} \end{array}$$

CM 4

CRN 133440-72-9

CMF (C15 H12 F6 N2 O2 . C14 H8 Cl2 O3)x

CCI PMS

CM 5

CRN 83558-87-6

CMF C15 H12 F6 N2 O2

CM 6

CRN 7158-32-9 CMF C14 H8 C12 O3

RN 389104-93-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, carbonylbis(imino-2,1-ethanediyl) ester, polymer with 4,4'-oxybis[benzoyl chloride] polymer with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[2-aminophenol] [2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate (9CI) (CA INDEX NAME)

CM 1

CRN 86219-64-9 CMF C13 H20 N2 O5

CM 2

CRN 389104-91-0 CMF (C15 H12 F6 N2 O2 . C14 H8 Cl2 O3)x . x C7 H11 N O4

CM 3

CRN 96571-20-9 CMF C7 H11 N O4

CM 4

CM 5

CRN 83558-87-6 CMF C15 H12 F6 N2 O2

$$CF_3$$
 CF_3
 CF_3

CM 6

CRN 7158-32-9 CMF C14 H8 C12 O3

RN 389104-94-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, carbonylbis(imino-2,1-ethanediyl) ester, polymer with 4,4'-oxybis[benzoyl chloride] polymer with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[2-aminophenol] [2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate, and oxybis(2,1-ethanediyloxy-2,1-ethanediyl) bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 86219-64-9 CMF C13 H20 N2 O5

CM 2

CRN 109-17-1 CMF C16 H26 O7

PAGE 1-A
H₂C O O CH₂

PAGE 1-B

— Me

CM 3

CRN 389104-91-0 CMF (C15 H12 F6 N2 O2 . C14 H8 Cl2 O3)x . x C7 H11 N O4

CM 4

CRN 96571-20-9 CMF C7 H11 N O4

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ || & || \\ \text{HO}_2\text{C} - \text{NH} - \text{CH}_2 - \text{CH}_2 - \text{O} - \text{C} - \text{C} - \text{Me} \end{array}$$

CM 5

CRN 133440-72-9

CMF (C15 H12 F6 N2 O2 . C14 H8 Cl2 O3)x

CCI PMS

> CM 6

CRN 83558-87-6

CMF C15 H12 F6 N2 O2

CM

CRN 7158-32-9 C14 H8 Cl2 O3 CMF

IT 389104-83-0P, 2,2-Bis(3-amino-4-

hydroxyphenyl) hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, phthalic anhydride-terminated, ester with 2-isocyanatoethyl methacrylate

389104-84-1P, 2,2-Bis(3-amino-4-

hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, terminated with methanesulfonyl chloride, carbamate ester with 2-isocyanatoethyl methacrylate 389104-85-2P, 2,2-Bis(3-amino-4-

hydroxyphenyl) hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, terminated with p-toluenesulfonyl chloride, carbamate ester with 2-isocyanatoethyl methacrylate 389104-86-3P, 2,2-Bis(3-amino-4-

hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, terminated with 5-norbornene-2,3-dicarboxylic anhydride, carbamate ester with

2-isocyanatoethyl methacrylate 389104-87-4P,

2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, terminated with glutaric anhydride, carbamate ester with

2-isocyanatoethyl methacrylate 389104-89-6P,

2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, terminated with di-tert-butyl carbonate, carbamate ester with 2-isocyanatoethyl methacrylate 389104-90-9P,

2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, carbamate ester with 2-isocyanatoethyl methacrylate 389104-95-4P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, terminated with cyclohexane-1,2-dicarboxylic anhydride, carbamate ester with 2-isocyanatoethyl methacrylate (photo-sensitive polybenzoxazole precursor resins and alkali-developable compns. useful for lithog. patterning containing them) 389104-83-0 HCAPLUS

RN 389104-83-0 CN Poly[oxy-1,

Poly[oxy-1,4-phenylenecarbonylimino(6-hydroxy-1,3-phenylene)[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene](4-hydroxy-1,3-phenylene)iminocarbonyl-1,4-phenylene], α -[4-[[3-[1-[3-[(2-carboxybenzoyl)amino]-4-hydroxyphenyl]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]-6-hydroxyphenyl]amino]carbonyl]phenyl]- ω -[4-[[3-[1-[3-[(2-carboxybenzoyl)amino]-4-hydroxyphenyl]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]-6-hydroxyphenyl]amino]carbonyl]phenoxy]-, [2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate (9CI) (CA INDEX NAME)

CM 1

CRN 389077-92-3 CMF (C29 H18 F6 N2 O5)n C60 H38 F12 N4 O13 CCI PMS

PAGE 1-A

PAGE 1-C

CM 2

CRN 96571-20-9 CMF C7 H11 N O4

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ & || & || \\ & \text{HO}_2\text{C--NH--CH}_2\text{--CH}_2\text{--O--C--C--Me} \end{array}$$

RN 389104-84-1 HCAPLUS

CN Poly[oxy-1,4-phenylenecarbonylimino(6-hydroxy-1,3-phenylene)[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene](4-hydroxy-1,3-phenylene)iminocarbonyl-1,4-phenylene], α-[4-[[6-hydroxy-3-[2,2,2-trifluoro-1-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]-1-(trifluoromethyl)ethyl]phenyl]amino]carbonyl]phenyl]-ω-[4-[[6-hydroxy-3-[2,2,2-trifluoro-1-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]-1-(trifluoromethyl)ethyl]phenyl]amino]carbonyl]phenoxy]-, [2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate (9CI) (CA INDEX NAME)

CM 1

CRN 389077-94-5 CMF (C29 H18 F6 N2 O5)n C46 H34 F12 N4 O11 S2 CCI PMS

PAGE 1-A

PAGE 1-B

PAGE 1-C

PAGE 2-A

0

CM 2

CRN 96571-20-9 CMF C7 H11 N O4

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ || & || \\ \text{HO}_2\text{C} - \text{NH} - \text{CH}_2 - \text{CH}_2 - \text{O} - \text{C} - \text{C} - \text{Me} \end{array}$$

RN 389104-85-2 HCAPLUS
CN Poly[oxy-1,4-phenylenecarbonylimino(6-hydroxy-1,3-phenylene) [2,2,2-trifluoro-1-(trifluoromethyl)ethylidene] (4-hydroxy-1,3-phenylene)iminocarbonyl-1,4-phenylene], α-[4-[[6-hydroxy-3-[2,2,2-trifluoro-1-[4-hydroxy-3-[(4-methylphenyl)sulfonyl]amino]phenyl]-1-(trifluoromethyl)ethyl]phenyl]amino]carbonyl]phenyl]-ω-[4-[[6-hydroxy-3-[2,2,2-trifluoro-1-[4-hydroxy-3-[(4-methylphenyl)sulfonyl]amino]phenyl]-1-(trifluoromethyl)ethyl]phenyl]amino]carbonyl]phenoxy]-, [2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate (9CI) (CA INDEX NAME)

CM 1

CRN 389077-95-6

CMF (C29 H18 F6 N2 O5)n C58 H42 F12 N4 O11 S2

CCI PMS

PAGE 1-A

PAGE 1-C

CM 2

CRN 96571-20-9 CMF C7 H11 N O4

RN 389104-86-3 HCAPLUS

CN Poly[oxy-1,4-phenylenecarbonylimino(6-hydroxy-1,3-phenylene)[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene](4-hydroxy-1,3-phenylene)iminocarbonyl-1,4-phenylene], α -[4-[[3-[2,2,2-trifluoro-1-[3-(1,3,3a,4,7,7a-hexahydro-1,3-dioxo-4,7-methano-2H-isoindol-2-yl)-4-hydroxyphenyl]-1-(trifluoromethyl)ethyl]-6-

hydroxyphenyl]amino]carbonyl]phenyl]- ω -[4-[[[3-[2,2,2-trifluoro-1-[3-(1,3,3a,4,7,7a-hexahydro-1,3-dioxo-4,7-methano-2H-isoindol-2-yl)-4-hydroxyphenyl]-1-(trifluoromethyl)ethyl]-6-hydroxyphenyl]amino]carbonyl]phenoxy]-, [2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate (9CI) (CA INDEX NAME)

CM 1

CRN 389077-97-8 CMF (C29 H18 F6 N2 O5)n C62 H42 F12 N4 O11 CCI PMS

PAGE 1-A

PAGE 1-B

HO----

PAGE 1-C

CM 2

CRN 96571-20-9 CMF C7 H11 N O4

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ || & || \\ \text{HO}_2\text{C} - \text{NH} - \text{CH}_2 - \text{CH}_2 - \text{O} - \text{C} - \text{C} - \text{Me} \end{array}$$

RN 389104-87-4 HCAPLUS

Poly[oxy-1,4-phenylenecarbonylimino(6-hydroxy-1,3-phenylene) [2,2,2-trifluoro-1-(trifluoromethyl)ethylidene] (4-hydroxy-1,3-phenylene)iminocarbonyl-1,4-phenylene], α-[4-[[3-[1-[3-[(4-carboxy-1-oxobutyl)amino]-4-hydroxyphenyl]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]-6-hydroxyphenyl]amino]carbonyl]phenyl]-ω-[4-[[[3-[1-[3-[(4-carboxy-1-oxobutyl)amino]-4-hydroxyphenyl]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]-6-hydroxyphenyl]amino]carbonyl]phenoxy]- (9CI) (CA INDEX NAME)

CM 1

CRN 389077-99-0 CMF (C29 H18 F6 N2 O5)n C54 H42 F12 N4 O13 CCI PMS

PAGE 1-A

PAGE 1-C

__ OH

RN

CM 2

CRN 96571-20-9 CMF C7 H11 N O4

$$\begin{array}{c|c} \mathsf{O} & \mathsf{CH}_2 \\ || & || \\ \mathsf{HO}_2\mathsf{C} - \mathsf{NH} - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{O} - \mathsf{C} - \mathsf{C} - \mathsf{Me} \end{array}$$

389104-89-6 HCAPLUS

CN Poly[oxy-1,4-phenylenecarbonylimino(6-hydroxy-1,3-phenylene)[2,2,2trifluoro-1-(trifluoromethyl)ethylidene](4-hydroxy-1,3phenylene)iminocarbonyl-1,4-phenylene], α-[4-[[[3-[1-[3[(1,1-dimethylethoxy)carbonyl]amino]-4-hydroxyphenyl]-2,2,2-

trifluoro-1-(trifluoromethyl)ethyl]-6hydroxyphenyl]amino]carbonyl]phenyl]-ω-[4-[[[3-[1-[3-[((1,1-

dimethylethoxy) carbonyl]amino]-4-hydroxyphenyl]-2,2,2-trifluoro-1(trifluoromethyl)ethyl]-6-hydroxyphenyl]amino]carbonyl]phenoxy]-,
[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate (9CI) (CA
INDEX NAME)

CM 1

CRN 389104-88-5

CMF (C29 H18 F6 N2 O5)n C54 H46 F12 N4 O11

CCI PMS

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PAGE 1-B

PAGE 1-C

_ OH

CM 2

CRN 96571-20-9 CMF C7 H11 N O4

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{HO}_2\text{C-NH-CH}_2\text{-CH}_2\text{-O-C-C-Me} \end{array}$$

RN 389104-90-9 HCAPLUS

CN Poly[oxy-1,4-phenylenecarbonylimino(6-hydroxy-1,3-phenylene)[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene](4-hydroxy-1,3-phenylene)iminocarbonyl-1,4-phenylene], [2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate (ester) (9CI) (CA INDEX NAME)

CM 1

CRN 112480-82-7 CMF (C29 H18 F6 N2 O5)n CCI PMS

CM 2

CRN 96571-20-9 CMF C7 H11 N O4

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ || & || \\ \text{HO}_2\text{C} - \text{NH} - \text{CH}_2 - \text{CH}_2 - \text{O} - \text{C} - \text{C} - \text{Me} \end{array}$$

RN 389104-95-4 HCAPLUS

Poly[oxy-1,4-phenylenecarbonylimino(6-hydroxy-1,3-phenylene)[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene](4-hydroxy-1,3-phenylene)iminocarbonyl-1,4-phenylene], α-[4-[[[3-[1-[3-[[(2-carboxycyclohexyl)carbonyl]amino]-4-hydroxyphenyl]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]-6-hydroxyphenyl]amino]carbonyl]phenyl]-ω-[4-[[[3-[1-[3-[[(2-carboxycyclohexyl)carbonyl]amino]-4-hydroxyphenyl]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]-6-hydroxyphenyl]amino]carbonyl]phenoxy]-, [2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate (9CI) (CA INDEX NAME)

CM 1

CRN 389078-02-8 CMF (C29 H18 F6 N2 O5)n C60 H50 F12 N4 O13 CCI PMS

PAGE 1-A

PAGE 1-C

CM 2

CRN 96571-20-9 CMF C7 H11 N O4

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ || & || \\ \text{HO}_2\text{C-NH-CH}_2\text{--CH}_2\text{--O-C-C-Me} \end{array}$$

- IC ICM C08G073-22
 - ICS C08K005-00; C08L079-06; G03F007-038; G03F007-40; H01L021-027
- CC 37-3 (Plastics Manufacture and Processing)
 Section cross-reference(s): 74, 76
- st neg working photoresist hydroxy polyamide isocyanatoethyl methacrylate modified resin; semiconductor device lithog patterning acrylic hydroxy polyamide polybenzoxazole

```
LEE 10/743,441
    precursor
     Polyethers, preparation
IT
        (acrylic-polyamide-, fluorine-containing; photo-sensitive
       polybenzoxazole precursor resins and
        alkali-developable compns. useful for lithog. patterning containing
        them)
IT
     Fluoropolymers, preparation
        (acrylic-polyamide-polyether-; photo-sensitive polybenzoxazole
       precursor resins and alkali-developable compns. useful
        for lithog. patterning containing them)
IT
     Polyethers, preparation
        (acrylic-polybenzoxazole-, fluorine-containing; photo-sensitive
       polybenzoxazole precursor resins and
       alkali-developable compns. useful for lithog. patterning containing
        them)
IT
     Fluoropolymers, preparation
        (acrylic-polybenzoxazole-polyether-; photo-sensitive
       polybenzoxazole precursor resins and
       alkali-developable compns. useful for lithog. patterning containing
        them)
IT
    Polybenzoxazoles
        (acrylic-polyether-, fluorine-containing; photo-sensitive
       polybenzoxazole precursor resins and
       alkali-developable compns. useful for lithog. patterning containing
       them)
IT
    Polyamides, preparation
        (acrylic-polyether-, fluorine-containing; photo-sensitive
       polybenzoxazole precursor resins and
       alkali-developable compns. useful for lithog. patterning containing
       them)
TΤ
    Dielectric films
     Photoresists
     Semiconductor device fabrication
        (photo-sensitive polybenzoxazole precursor resins and
       alkali-developable compns. useful for lithog. patterning containing
       them)
IT
    Acrylic polymers, preparation
        (polybenzoxazole-polyether-, fluorine-containing; photo-sensitive
       polybenzoxazole precursor resins and.
       alkali-developable compns. useful for lithog. patterning containing
       them)
    389104-92-1DP, 2,2-Bis(3-amino-4-
TT
    hydroxyphenyl) hexafluoropropane-4,4'-diphenyl ether dicarboxylic
    acid dichloride copolymer 2-isocyanatoethyl methacrylate
    ester-tetraethylene glycol dimethacrylate copolymer, reaction
    products with termination acids 389104-92-1P,
     2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl
    ether dicarboxylic acid dichloride copolymer 2-isocyanatoethyl
    methacrylate ester-tetraethylene glycol dimethacrylate copolymer
```

ester-tetraethylene glycol dimethacrylate copolymer, reaction products with termination acids 389104-92-1P,

2,2-Bis(3-amino-4-hydroxyphenyl) hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer 2-isocyanatoethyl methacrylate ester-tetraethylene glycol dimethacrylate copolymer

389104-93-2DP, 2,2-Bis(3-amino-4-hydroxyphenyl) hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer 2-isocyanatoethyl methacrylate ester-N,N'-di(2-methacryloxyethyl) urea copolymer, reaction products with termination acids 389104-94-3P,

2,2-Bis(3-amino-4-hydroxyphenyl) hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer 2-isocyanatoethyl methacrylate ester-N,N'-di(2-methacryloxyethyl) urea-tetraethylene glycol dimethacrylate copolymer

(photo-sensitive polybenzoxazole precursor resins and alkali-developable compns. useful for lithog.

```
patterning containing them)
IT
     389104-83-0P, 2,2-Bis(3-amino-4-
     hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic
     acid dichloride copolymer polyamide sru, phthalic
     anhydride-terminated, ester with 2-isocyanatoethyl methacrylate
     389104-84-1P, 2,2-Bis(3-amino-4-
     hydroxyphenyl) hexafluoropropane-4,4'-diphenyl ether dicarboxylic
     acid dichloride copolymer polyamide sru, terminated with
     methanesulfonyl chloride, carbamate ester with 2-isocyanatoethyl
     methacrylate 389104-85-2P, 2,2-Bis(3-amino-4-
     hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic
     acid dichloride copolymer polyamide sru, terminated with
     p-toluenesulfonyl chloride, carbamate ester with 2-isocyanatoethyl
     methacrylate 389104-86-3P, 2,2-Bis(3-amino-4-
     hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic
     acid dichloride copolymer polyamide sru, terminated with
     5-norbornene-2,3-dicarboxylic anhydride, carbamate ester with
     2-isocyanatoethyl methacrylate 389104-87-4P,
     2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl
     ether dicarboxylic acid dichloride copolymer polyamide sru,
     terminated with glutaric anhydride, carbamate ester with
     2-isocyanatoethyl methacrylate 389104-89-6P,
     2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl
     ether dicarboxylic acid dichloride copolymer polyamide sru,
     terminated with di-tert-butyl carbonate, carbamate ester with
     2-isocyanatoethyl methacrylate 389104-90-9P,
     2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl
     ether dicarboxylic acid dichloride copolymer polyamide sru,
     carbamate ester with 2-isocyanatoethyl methacrylate 389104-95
     -4P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-
     diphenyl ether dicarboxylic acid dichloride copolymer polyamide
     sru, terminated with cyclohexane-1,2-dicarboxylic anhydride,
     carbamate ester with 2-isocyanatoethyl methacrylate
        (photo-sensitive polybenzoxazole precursor resins and
        alkali-developable compns. useful for lithog.
       patterning containing them)
IT
                   133440-72-9DP, 2,2-Bis(3-amino-4-
     112480-82-7P
     hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic
     acid dichloride copolymer, reaction products with termination
             389077-92-3P
                           389077-94-5P
                                           389077-95-6P
                                                          389077-97-8P
                    389078-01-7P
                                   389078-02-8P
        (photo-sensitive polybenzoxazole precursor resins and
        alkali-developable compns. useful for lithog. patterning containing
       them)
IT
     17322-98-4
        (photoinitiators; photo-sensitive polybenzoxazole
       precursor resins and alkali-developable compns. useful
       for lithog. patterning containing them)
L20 ANSWER 24 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN
                         2001:709715 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         135:264587
TITLE:
                         Lithographic printing plate precursor
                         comprising compounds with changable
                         hydrophilicity under heat
                         Oohashi, Hidekazu
INVENTOR(S):
```

USHA SHRESTHA EIC 1700 REM 4B28

Fuji Photo Film Co., Ltd., Japan

Eur. Pat. Appl., 110 pp.

CODEN: EPXXDW

Patent

PATENT ASSIGNEE(S):

DOCUMENT TYPE:

SOURCE:

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.					KIN		DATE			APPI	ICAT	ION	NO.		DA	ATE
	EP	1136	- 281			A1		2001	0926	:	EP 2	2001-	1063	93			001
	EP							2004 , ES,		GR	GR	τπ	T.T	T.IT	NT.		320
	TD		MC,	PT,	ΙE,	SI,	LT,	, LV, 2001:	FI,	RO					11.5,	01,	
	JP	2001	33/4	60		A2		2001	1207		UP 2	2000-	33//	92			000 106
	US	2003	1905	53		A1		2003	1009	. 1	US 2	2001-	8120	53			001
		6680 1371				B2 A1		2004			EP 2	2003-	2115	7		03	320
																03	001 320
		R:				DE, FI,		, ES, , TR	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	
	AT	2581	15			Е		2004	0215	j	AT 2	2001-	1063	93			001 320
PRIO	RITY	APP	LN.	INFO	. :						JP 2	2000-	7859	7	1	A	000
																03	321
										•	JP 2	2000-	3377	92	Ĭ		000 106
										:	EP 2	2001-	1063	93	1		001 320

AB A lithog. printing plate precursor which comprises a support having a hydrophilic surface containing a latex A and an ink-receptive layer B whose solubility at least either in water or in an aqueous solution is converted by heat, wherein at least one layer of either layer A or layer B contains a light/heat converting agent. The object of the present invention is to provide a lithog. printing plate precursor developable with water or an aqueous solution, loadable on a printing machine without development after imaging and printable, which is improved in sensitivity and press life, and capable of providing clear printed matters having no residual colors and stains.

IT 265316-27-6 289893-00-1 289893-02-3

(lithog. printing plate precursor

comprising compds. with changable hydrophilicity under heat)

RN 265316-27-6 HCAPLUS

CN Acetic acid, [(4-ethenylphenyl)sulfonyl]-, homopolymer (9CI). (CI INDEX NAME)

CM 1

CRN 103945-08-0 CMF C10 H10 O4 S

$$HO_2C-CH_2-S$$
 $CH=CH_2$

RN 289893-00-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[(carboxymethyl)sulfonyl]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 289892-99-5 CMF C8 H12 O6 S

RN 289893-02-3 HCAPLUS

CN Benzeneacetic acid, α -[(4-ethenylphenyl)sulfonyl]-, sodium salt, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 289893-01-2 CMF C16 H14 O4 S . Na

$$\begin{array}{c|c} \text{CH} & \text{CH}_2 \\ \text{HO}_2\text{C} - \text{CH} - \text{S} \\ & \text{Ph} & \text{O} \end{array}$$

Na

IC ICM B41N001-14

ICS B41C001-10; B41M005-36

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST lithog printing plate **precursor** compd heat induced changable hydrophilicity

IT Hydrophilicity

```
Lithographic plates
        (lithog. printing plate precursor comprising compds.
       with changable hydrophilicity under heat)
     134127-48-3 289893-03-4 361542-00-9
IT
        (IR absorber; lithog. printing plate precursor
       comprising compds. with changable hydrophilicity under heat)
     55844-94-5P, Styrene-chloromethylstyrene-divinylbenzene copolymer
IT
     81876-52-0P, tert-Butyl methacrylate-ethylene glycol
     dimethacrylate copolymer 361486-95-5P
        (lithog. printing plate precursor comprising compds.
       with changable hydrophilicity under heat)
TT
     52858-60-3 215958-15-9 215958-19-3 265316-27-6
     265316-42-5
                  265316-43-6 289893-00-1
     289893-02-3
        (lithog. printing plate precursor
       comprising compds. with changable hydrophilicity under heat)
REFERENCE COUNT:
                              THERE ARE 6 CITED REFERENCES AVAILABLE
                              FOR THIS RECORD. ALL CITATIONS AVAILABLE
                              IN THE RE FORMAT
L20 ANSWER 25 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
                        2001:579379 HCAPLUS
DOCUMENT NUMBER:
                        135:173003
TITLE:
                        Silver halide diffusion-transfer lithographic
                        plate precursor having protecting
                        layer on support
INVENTOR(S):
                        Endo, Akihiro
                        Fuji Photo Film 💋 o., Ltd., Japan
PATENT ASSIGNEE(S):
SOURCE:
                        Jpn. Kokai Tokkyo Koho, 34 pp.
                        CODEN: JKXXAF
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        Japanese
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
    PATENT NO.
                      KIND
                               DATÉ
                                           APPLICATION NO.
                                                                 DATE
                        ____
                               20010810 JP 2000-25546
    JP 2001215712
                        A2
                                                                  2000
                                                                  0202
                                           JP 2000-25546
PRIORITY APPLN. INFO.:
                                                                  2000
                                                                  0202
    The title printing plate precursor has a phys.
AB
    development nuclei layer and a light-sensitive silver halide
    emulsion layer on an aluminum support, wherein the aluminum
    support has 0.1-10 mg/m2 Si atom adhered on the surface and a
    protecting layer made of a polymer having repeating units of onium
    groups and Ag coordinated groups. The materials, which has the
    controlled amount of Si on the support and the protecting layer on
    the support, provides the printing plate of the improved printing
    durability and the prevented soiling.
IT
    214279-68-2 353456-37-8
        (protecting layer on support for silver halide
       diffusion-transfer lithog. plate precursor)
    214279-68-2 HCAPLUS
RN
    Benzenemethanaminium, ar-ethenyl-N,N,N-trimethyl-, chloride,
CN
```

polymer with 4-ethenylbenzoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 26616-35-3 CMF C12 H18 N . C1 CCI IDS



 $D1-CH=CH_2$

 Me_3+N-CH_2-D1

• cl -

CM 2

CRN 1075-49-6 CMF C9 H8 O2

$$_{\mathrm{CH}=\mathrm{CH}_{2}}^{\mathrm{HO}_{2}\mathrm{C}}$$

RN 353456-37-8 HCAPLUS

CN Benzenemethanaminium, ar-ethenyl-N,N,N-triethyl-, chloride, polymer with 4-ethenylbenzoic acid and (ethenylphenyl)methyl carbamimidothioate monohydrochloride (9CI) (CA INDEX NAME)

CM 1

CRN 87051-44-3 CMF C10 H12 N2 S . Cl H CCI IDS

$$D1-CH=CH_2$$

● HCl

CM 2

CRN 51241-16-8 CMF C15 H24 N . Cl CCI IDS



$$D1-CH=CH_2$$

$$Et_3+N-CH_2-D1$$

• cl-

CM 3

CRN 1075-49-6 CMF C9 H8 O2

```
IC
     ICM G03F007-07
     ICS G03C008-06; G03F007-00; G03F007-11
CC
     74-6 (Radiation Chemistry, Photochemistry, and Photographic and
     Other Reprographic Processes)
     silver halide complex diffusion transfer lithog plate
ST
     precursor
IT
     Lithographic plates
     Photographic emulsions
        (silver halide diffusion-transfer lithog. plate
        precursor having protecting layer on support)
     7429-90-5, Aluminum, uses
IT
        (Silver halide diffusion-transfer lithog. plate
        precursor having protecting layer on support)
IT
     1344-09-8, Sodium silicate
        (Silver halide diffusion-transfer lithog. plate
        precursor having protecting layer on support)
                                             353456-35-6
IT
     121448-09-7 214279-68-2
                              353456-34-5
     353456-36-7 353456-37-8
                             353456-38-9
        (protecting layer on support for silver halide
        diffusion-transfer lithog. plate precursor)
L20 ANSWER 26 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
                         2001:100796 HCAPLUS
DOCUMENT NUMBER:
                         134:170840
                         Lithographic plates for writing by low-energy
TITLE:
                         heat mode exposure
                         Yamazaki, Sumiaki; Kawamura, Koichi
INVENTOR(S):
PATENT ASSIGNEE(S):
                         Fuji Photo Film Co., Ltd., Japan
                         Jpn. Kokai Tokkyo Koho, 42 pp.
SOURCE:
                         CODEN: JKXXAF
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         Japanese
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
```

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
 JР 2001033949	A2	20010209	JP 2000-144823	
				2000 0517
PRIORITY APPLN. INFO.:			JP 1999-138776 A	1999 0519

- The plate comprises a recording layer containing a 3-dimensionally crosslinked polymer layer having hydrophilic functional groups, which change into hydrophobic groups on irradiation of radiant beam or heat. Preferably, the polymer is a hydrolysis polymerization product of (a) compds. having the hydrophilic functional groups and ≥1 group(s) selected from OH, NH2, NHCOR3, and Si(OR4)3 (R3-4 = alkyl, aryl) and (b) R5nX1(OR6)4-n (R5-6 = alkyl, aryl; X1 = Si, Al, Ti, Zr; n = 0, 1, 2). The recording layer may also contain photo-thermal conversion substances, e.g. IR absorbers. The polymer may be crosslinked by application of light or heat. Images are formed on the plates by direct writing of digital information.
- IT 324752-52-5P 324752-69-4P

 (heat mode exposure direct writing lithog. plates comprising of radiation- or heat-sensitive

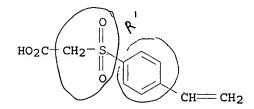
hydrophilic crosslinked polymers)

RN 324752-52-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with [(4-ethenylphenyl)sulfonyl]acetic acid, silicic acid and silicic acid ethyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 103945-08-0 CMF C10 H10 O4 S



CM 2

· CRN 1343-98-2

CMF Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3 ·

CRN 868-77-9 CMF C6 H10 O3

$$^{\rm H_2C}_{\parallel \parallel \parallel}$$
 O $^{\rm Me-C-C-O-CH_2-CH_2-OH}_{\parallel \parallel}$

CM 4

CRN 11099-06-2

CMF C2 H6 O . x Unspecified

CM 5

CRN 1343-98-2

CMF . Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 6

CRN 64-17-5

CMF C2 H6 O

 $\rm H_3C-CH_2-OH$

RN 324752-69-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-[(carboxymethyl)sulfonyl]propyl ester, polymer with silicic acid, silicic acid ethyl ester and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 265316-39-0 CMF C9 H14 O6 S

CM 2

CRN 2530-85-0 CMF C10 H20 O5 Si

$$^{\mathrm{H_2C}}_{\parallel}$$
 O OMe $^{\mathrm{OMe}}_{\parallel}$ Me-C-C-O-(CH₂)₃-Si-OMe $^{\mathrm{OMe}}_{\parallel}$ OMe

CM 3

CRN 1343-98-2

CMF Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 11099-06-2

CMF C2 H6 O . x Unspecified

CM 5

CRN 1343-98-2

CMF Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 6

CRN 64-17-5 CMF C2 H6 O

 H_3C-CH_2-OH

IT 324747-77-5P

(heat mode exposure direct writing lithog. plates comprising of radiation- or heat-sensitive hydrophilic crosslinked polymers)

RN 324747-77-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester,
 polymer with [(4-ethenylphenyl)sulfonyl]acetic acid (9CI) (CA
 INDEX NAME)

CM 1

CRN 103945-08-0 CMF C10 H10 O4 S

$$HO_2C-CH_2-S$$
 $CH=CH_2$

CM 2

CRN 2530-85-0 CMF C10 H20 O5 Si

$$egin{array}{c|cccc} H_2C & O & OMe \\ \parallel & \parallel & \parallel & \parallel \\ Me-C-C-O-(CH_2)_3-Si-OMe \\ \parallel & & & & & & & \\ OMe \\ \hline \end{array}$$

IC ICM G03F007-00

ICS B41N001-14; G03F007-004; G03F007-075

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) Section cross-reference(s): 38

IT Optical materials

(IR absorbers; heat mode exposure direct writing lithog. plates comprising of radiation- or **heat-sensitive** hydrophilic crosslinked polymers)

IT IR materials

(absorbers; heat mode exposure direct writing lithog. plates comprising of radiation- or heat-sensitive hydrophilic crosslinked polymers)

IT Ceramers

```
Lithographic plates
     Photoimaging materials
        (heat mode exposure direct writing lithog. plates comprising of
        radiation- or heat-sensitive hydrophilic
        crosslinked polymers)
     Recording materials
IT
        (thermal; heat mode exposure direct writing lithog, plates
        comprising of radiation- or heat-sensitive
        hydrophilic crosslinked polymers)
     5496-71-9, IRG 022
                         22371-56-8, NK 3508
IT
        (IR absorber; heat mode exposure direct writing lithog. plates
        comprising of radiation- or heat-sensitive
        hydrophilic crosslinked polymers)
                                   324747-72-0P
IT
     324747-69-5P
                    324747-70-8P
                                                  324747-74-2P
     324747-75-3P
                    324747-76-4P 324752-52-5P
                                                324752-53-6P
     324752-55-8P
                    324752-56-9P
                                   324752-58-1P
                                                  324752-61-6P
     324752-63-8P 324752-66-1P
                                   324752-67-2P 324752-68-3P
     324752-69-4P
        (heat mode exposure direct writing lithog. plates
        comprising of radiation- or heat-sensitive
        hydrophilic crosslinked polymers)
IT
     324747-67-3P
                   324747-73-1P
        (heat mode exposure direct writing lithog. plates comprising of
        radiation- or heat-sensitive hydrophilic
        crosslinked polymers)
IT
     324747-77-5P
        (heat mode exposure direct writing lithog. plates
        comprising of radiation- or heat-sensitive
        hydrophilic crosslinked polymers)
IT
     324747-78-6P
        (heat mode exposure direct writing lithog. plates comprising of
        radiation- or heat-sensitive hydrophilic
        crosslinked polymers)
L20 ANSWER 27 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
                         1994:496062 HCAPLUS
DOCUMENT NUMBER:
                         121:96062
                         Electrophotographic lithographic plate
TITLE:
                         precursor
INVENTOR(S):
                         Kato, Eiichi
PATENT ASSIGNEE(S):
                         Fuji Photo Film Co Ltd, Japan
                         Jpn. Kokai Tokkyo Kobo, 98 pp.
SOURCE:
                         CODEN: JKXXAF
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         Japanese
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                    DATE
     JP 05127393
                          A2
                                19/930525
                                            JP 1991-311312
                                                                    1991
                                                                    1031
PRIORITY APPLN. INFO.:
                                            JP 1991-311312
                                                                    1991
                                                                    1031
     In the title precursor utilizing an electrophotog.
AB
     photoreceptor made by forming on an elec. conductive support
```

≥1 photoconductive layer(s) and forming on the top layer a surface layer, the surface layer contains ≥1 kind(s) of the following nonag. solvent-dispersed resin grains [L] and the photoconductive layer contains ≥1 kind(s) of the following resins [A] as a binder resin. The resin grains [L] are obtained in a nonaq. solvent by dispersion polymerization of ≥1 kind(s) of mono functional monomers (C) being soluble in the nonag. solvent but insol. after polymerization and which contains ≥1 kind(s) of functional groups which forms ≥1 of SH, SO3H, amino, and P(:Z)(-Z-H)R1 groups [Z = O, S; R1 = -Z-H, hydrocarbon, -Z-R2 (R2)]= hydrocarbon)] upon decomposition in the presence of a dispersion stabilizing polymer containing at least repeating units containing a substituent group(s) containing Si and/or F and soluble to the nonaq. The resins [A] are resins having a weight average mol. weight 1 x 103-2 x 104; the resins contain as a polymer component the repeating monomer units [-CHa1-Ca2(CO2R3)-] (a1, a2 = H, halo, CN, hydrocarbon group; R3 = hydrocarbon group) >30% and a polymer component 0.5-15 % having ≥1 kind of polar groups selected from -PO3H2, -SO3H, -CO2H, -P(:O)(OH)R1 [R1 = hydrocarbon group, OR2 (R2 = hydrocarbon group)], and cyclic acid anhydride-containing groups. The lithog. plate precursor provides superior printing images and shows high printing durability even under severe conditions and is effective for scanning exposure using a semiconductor laser.

IT 155554-91-9P

(latex, preparation and use of, for surface layer of electrophotog. lithog. plate precursor)

RN 155554-91-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,6-nonafluorohexyl ester, polymer with 2-carboxyethyl 2-propenoate, 1,2-ethanediyl di-2-propenoate and 2-[[2-(propylsulfonyl)ethoxy]sulfonyl]ethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 149212-82-8 CMF C11 H20 O7 S2

CM 2

CRN 24615-84-7 CMF C6 H8 O4

CM 3

CRN 2274-11-5 CMF C8 H10 O4

CM 4

CRN 1799-84-4 CMF C10 H9 F9 O2

```
O CH<sub>2</sub>
F_3C^-(CF_2)_3 - CH_2 - CH_2 - O - C - C - Me
```

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IC
    ICM G03G005-05
```

ICS G03G005-147; G03G013-28

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

```
IT
    149212-64-6P
                                   149212-68-0P
                                                  149212-70-4P
                   149212-66-8P
    149212-71-5P
                    149212-74-8P
                                   149212-75-9P
                                                  149212-76-0P
    149212-77-1P
                   149212-78-2P
                                   149212-79-3P
                                                  149212-80-6P
    149212-81-7P
                   149212-83-9P
                                   149212-84-0P
                                                  149212-85-1P
    149212-86-2P
                   149212-87-3P
                                   149212-88-4P
                                                  149212-89-5P
    149212-90-8P
                   149234-31-1P
                                   149234-33-3P 149234-35-5P
    149234-37-7P
                   149234-39-9P
                                   149234-64-0P
                                                  149234-65-1P
    149234-66-2P
                   149234-67-3P
                                   149234-68-4P
                                                  149234-69-5P
    149235-74-5P
                   149235-80-3P
                                   149235-82-5P
                                                  149295-86-3P
                                 156321-46-9P
    149333-66-4P 155554-91-9P
                                                156622-62-7P
    156705-17-8P
```

(latex, preparation and use of, for surface layer of electrophotog. lithog. plate precursor)

L20 ANSWER 28 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1994:446534 HCAPLUS

DOCUMENT NUMBER:

121:46534

TITLE:

Electrophotographic plate for

electrophotographic Xithographic plates

INVENTOR (S): Kato, Eiichi; Kasaj, Seishi

PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan

SOURCE:

PCT Int. Appl., 213 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ----19920903 WO 9215048 A1 ' WO 1992-JP188 1992

0221

W: US RW: AT. BE. CH.	DE.	DK. ES. FR.	GB, GR, IT, LU, MC,	NL.	SE
JP 04268564	A2	19920924		•	
					1991
			•		0222
JP 04291265	A2	19921015	JP 1991-78175		
					1991
					0319
JP 04304462	A2	19921027	JP 1991-94886		1001
					1991
JP 04355457	A2	19921209	JP 1991-156246		0402
UP 04355457	AZ	19921209	JP 1991-136246		1991
					0531
EP 535236	A1	19930407	EP 1992-905099		0331
	***	13330107	21 1332 303033		1992
					0221
EP 535236	В1	19961218			
R: DE, GB					
US 5342716	Α	19940830	US 1992-946320		
					1992
					1022
PRIORITY APPLN. INFO.:			JP 1991-78711	A	
•					1991
					0222
			TD 1001 70175	70	
•		•	JP 1991-78175	A	1991
6:					0319
					0319
			JP 1991-94886	А	
			01 1331 31000		1991
,					0402
			JP 1991-156246	Α	
					1991
					0531
		•	WO 1992-JP188	W	
					1992
•					0221

The title electrophotog. plate utilizing a photoconductor layer containing photoconductive ZnO, a spectral sensitizer dye, and a binder resin, the binder resin contains ≥1 resins (A) (weight average mol. weight 1 + 103-2 + 104) containing polymer component [CHala2(CO2R3)] [a1, a2 = H, halo, CN, hydrocarbon moiety; R3 = hydrocarbon moiety] ≥ 30% and a polymer component containing ≥1 polar groups selected from PO3H2, SO3H, CO2H,P(O)(OH)R1 (R1 = hydrocarbon or oxyhydrocarbon moiety), and a cyclic acid anhydride moiety 0.5-15%. In addition, the photoconductor layer contains nonaq. medium dispersed resin fine particles (L) having particle size less than that of the maximum diameter of the photoconductive ZnO particles utilized above. L is obtained by copolymg. a monofunctional monomer possessing ≥1 functional groups capable of decomposing to form CO2H with another monofunctional monomer(s) in the precursor of a nonaq. solvent-soluble dispersion-stabilizing resin with structure repeating units containing F- and (or) Si-containing substituents. The electrophotog. plate gives lithog. printing plates giving superior

printed copies even under severe ambient conditions and having good durability.

IT 149072-56-0

(latex particles, for electrophotog. lithog. plates)

RN 149072-56-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,6-nonafluorohexyl ester, polymer with 2-carboxyethyl 2-propenoate, 1,2-ethanediyl di-2-propenoate and 1-[(2-methyl-1-oxo-2-propenyl)oxy]-2,5-pyrrolidinedione, graft (9CI) (CA INDEX NAME)

CM 1

CRN 38862-25-8 CMF C8 H9 N O4

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{O}-\text{C}-\text{C}-\text{Me} \\ \mid \\ \text{O} \end{array}$$

CM 2

CRN 24615-84-7 CMF C6 H8 O4

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{HO}_2\text{C}-\text{CH}_2-\text{CH}_2-\text{O}-\text{C}-\text{CH} \Longrightarrow \text{CH}_2 \end{array}$$

CM 3

CRN 2274-11-5 CMF C8 H10 O4

$$\begin{array}{c} {\rm O} & {\rm O} \\ || & || \\ {\rm H}_2{\rm C} = {\rm CH} - {\rm C} - {\rm O} - {\rm CH}_2 - {\rm CH}_2 - {\rm O} - {\rm C} - {\rm CH} = {\rm CH}_2 \\ \end{array}$$

CM 4

CRN 1799-84-4 CMF C10 H9 F9 O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{F}_3\text{C--} & (\text{CF}_2)_3 - \text{CH}_2 - \text{CH}_2 - \text{O} - \text{C} - \text{C} - \text{Me} \end{array}$$

```
IC
     ICM G03G005-05
     74-3 (Radiation Chemistry, Photochemistry, and Photographic and
CC
     Other Reprographic Processes)
     Section cross-reference(s): 35
     149072-29-7
                   149072-31-1
                                  149072-33-3
                                                149072-34-4
IT
     149072-35-5
                   149072-36-6
                                  149072-38-8
                                                149072-39-9
     149072-40-2
                   149072-41-3
                                  149072-42-4
                                                149072-43-5
     149072-44-6
                   149072-45-7
                                  149072-46-8
                                                149072-47-9
     149072-48-0
                   149072-49-1
                                  149072-50-4
                                                149072-51-5
     149072-52-6
                   149072-53-7
                                  149072-55-9 149072-56-0
     149072-57-1
                   149072-58-2
                                  149072-59-3
                                                149072-61-7
     149072-62-8
                   149072-63-9
                                  149072-98-0
                                                149072-99-1
                   149093-44-7
                                  149093-45-8
     149093-43-6
                                                149093-46-9
                   149093-48-1
                                  149093-50-5
     149093-47-0
                                                149093-51-6
     149093-53-8
                   149093-58-3
                                  149124-86-7
                                                149333-75-5
                   150497-84-0
                                  150497-86-2
                                                150497-88-4
     150497-83-9
     150497-96-4
        (latex particles, for electrophotog. lithog. plates)
```

L20 ANSWER 29 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1994:422526 HCAPLUS

DOCUMENT NUMBER:

121:22526

TITLE:

lithographic plate precursor of

direct image type

INVENTOR (S):

Kato, Eiichi; Ishii, Kazuo

PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan

SOURCE:

Eur. Pat. Appl., 127 pp. CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 530957	A1	19930310	EP 1992-306370	1992 0710
EP 530957 R: DE, GB	B1	19991222		0710
US 5368931	A	19941129	US 1992-910968	1992 0709
PRIORITY APPLN. INFO.:			JP 1991-169828	A 1991 0710
· .			JP 1991-220275	A 1991 0830
			JP 1991-231880	A 1991 0911

AB The title precursor comprises a base and an image-receptive layer containing resin grains obtained by subjecting to dispersion polymerization in an organ#c solvent a monofunctional monomer which is soluble in the solvent but is insol. after polymerization and contains ≥1 functional group capable of/producing ≥1 polar group through decomposition and a monofunctional polymer comprising a polymer chain containing/≥1 recurring unit each containing a Si- and/or F-containing/substituent and bonded to one end a polymerizable double bond group represented by the formula CHA1:CA2V- (V = 0, CO2, OCO, CH2OCO, CH2CO2, SO2, CONR1, SO2NR1, CONCHCO2, CONHCONH, or I; R1 = H of C1-18 hydrocarbyl; A1, A2 = H, halogen, cyano, hydrocarbyl, or CO2R2; R2 = H or hydrocarbyl). IT 149368-85-4P 149434-28-6P (preparation and copolymn. of , in preparing latexes for lithog . plate precursors) 149368-85-4 HCAPLUS RN

RN 149368-85-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,6-nonafluorohexyl ester, telomer with 2-carboxyethyl 2-propenoate and 2-mercaptoethanol, 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-41-4 CMF C4 H6 O2

 $\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-C-CO}_2 \text{H} \end{array}$

CM 2

CRN 163148-87-6 CMF (C10 H9 F9 O2 . C6 H8 O4)x . C2 H6 O S

CM 3

CRN 60-24-2 CMF C2 H6 O S

 $HO-CH_2-CH_2-SH$

CM 4

CRN 163148-86-5 CMF (C10 H9 F9 O2 . C6 H8 O4)x CCI PMS

CM 5

CRN 24615-84-7 CMF C6 H8 O4

$$\begin{array}{c} & \circ \\ || \\ \text{HO}_2\text{C-CH}_2\text{--CH}_2\text{--O-C-CH----} \text{CH}_2 \end{array}$$

CM 6

CRN 1799-84-4 CMF C10 H9 F9 O2

RN 149434-28-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, telomer with 2-mercaptoethanol and phenylbis(trifluoromethyl)silyl 2-methyl-2-propenoate, 3-[(1-oxo-2-propenyl)oxy]propanoate (9CI) (CA INDEX NAME)

CM 1

CRN 24615-84-7 CMF C6 H8 O4

$$\begin{array}{c} \text{O} \\ || \\ \text{HO}_2\text{C}-\text{CH}_2-\text{CH}_2-\text{O}-\text{C}-\text{CH} = \text{CH}_2 \end{array}$$

CM 2

CRN 163255-66-1 CMF (C12 H10 F6 O2 Si . C4 H6 O2)x . C2 H6 O S

CM 3

CRN 60-24-2 CMF C2 H6 O S

 ${\tt HO-CH_2-CH_2-SH}$

CM 4

CRN 163255-65-0 CMF (C12 H10 F6 O2 Si . C4 H6 O2)x CCI PMS CM 5

CRN 149072-54-8 CMF C12 H10 F6 O2 Si

CM 6

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-} \text{C-} \text{CO}_2 \text{H} \end{array}$$

IT 155554-40-8P 155554-91-9P

(preparation and use of, in image-receptive layers for lithog. plate precursors)

RN 155554-40-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with 2-carboxyethyl 2-propenoate, 1-ethyl-3-oxobutyl 2-propenoate and 3,3,4,4,5,5,6,6,6-nonafluorohexyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 155554-39-5 CMF C9 H14 O3

$$\begin{array}{c} O \\ H_2C = CH - C - O & O \\ | & || \\ Et - CH - CH_2 - C - Me \end{array}$$

CM 2

CRN 24615-84-7 CMF C6 H8 O4

$$0 \parallel Ho_2C-CH_2-CH_2-O-C-CH=CH_2$$

CM 3

CRN 1799-84-4 CMF C10 H9 F9 O2

CM 4

CRN 97-90-5 CMF C10 H14 O4

RN 155554-91-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,6-nonafluorohexyl ester, polymer with 2-carboxyethyl 2-propenoate, 1,2-ethanediyl di-2-propenoate and 2-[[2-(propylsulfonyl)ethoxy]sulfonyl]ethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 149212-82-8 CMF C11 H20 O7 S2

CM 2

CRN 24615-84-7 CMF C6 H8 O4

$$\begin{array}{c|c}
 & O \\
 & \parallel \\
 & \text{HO}_2\text{C}-\text{CH}_2-\text{CH}_2-\text{O}-\text{C}-\text{CH}==\text{CH}_2
\end{array}$$

CM 3

CRN 2274-11-5 CMF C8 H10 O4

```
H<sub>2</sub>C== CH- C- O- CH<sub>2</sub>- CH<sub>2</sub>- O- C- CH== CH<sub>2</sub>
     CM
         1799-84-4
         C10 H9 F9 O2
     CMF
F<sub>3</sub>C- (CF<sub>2</sub>)<sub>3</sub>-CH<sub>2</sub>-CH<sub>2</sub>-O-C-C-Me
TC
     ICM G03F007-033
     ICS B41N001-14
     74-5 (Radiation Chemistry, Photochemistry, and Photographic and
CC
     Other Reprographic Processes)
ST
     lithog plate precursor rein grain
IT
     Fluoropolymers
        (image-receptive layers containing polymer latexes and, for lithog.
        plate precursors)
IT
     Lithographic plates
        (precursors, direct image type, image-receptive
        layers containing polymer resin grains for)
IT
     Siloxanes and Silicones, uses
        (methacrylate-terminated, preparation and use of, in image-receptive
        layers for lithog. plate precursors)
IT
     25322-25-2, Acrylic acid-methyl methacrylate copolymer
     155555-00-3
                    155555-01-4
        (image-receptive layers containing polymer latexes and, for lithog.
        plate precursors)
IT
                     145168-89-4P
                                     145168-94-1P
                                                     145169-02-4P
     145168-75-8P
                                     145169-24-0P
                                                     145169-26-2P
     145169-03-5P
                     145169-04-6P
     145169-30-8P
                     145807-38-1P
                                     145807-40-5P
                                                     145807-41-6P
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     145807-51-8P
     145807-56-3P
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                                     145807-63-2P
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                     145807-66-5P
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                                                     145807-70-1P
     145807-65-4P
     145807-71-2P
                     145807-72-3P
                                     145807-78-9P
                                                     145807-80-3P
     146188-26-3DP, carboxy-terminated, ester with 2-hydroxyethyl
     methacrylate
                     147545-76-4P
                                     149072-24-2DP, reaction products
                                              149368-83-2P
     with 2-isocyanatoethyl methacrylate
                     149434-15-1P
                                     149434-21-9P
                                                     149434-25-3P ·
     149368-85-4P
                                     149658-55-9P
     149434-28-6P
                     149434-33-3P
        (preparation and copolymn. of, in preparing latexes for lithog
        . plate precursors)
     2358-84-1DP, Diethylene glycol dimethacrylate, polymers with
IT
     methacrylate-terminated siloxanes and methacrylates
     78830-72-5DP, polymers with methacrylate-terminated siloxanes and
     methacrylates
                      149212-88-4P
                                      149234-31-1P
                                                      150372-99-9P
     150373-00-5P
                     150373-02-7P
                                     150373-03-8P
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                     150373-08-3P
                                     150391-01-8P
                                                     150391-02-9P
     150391-87-0P
                     150419-15-1P
                                     150528-35-1P
                                                     150958-52-4P
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                                                     155554-22-6P
     150997-02-7P
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                                     155554-25-9P
                                                     155554-26-0P
                     155554-24-8P
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155554-29-3P

155554-27-1P

155554-28-2P

155554-30-6P

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                                    155554-33-9P
                                                   155554-34-0P
     155554-35-1P
                    155554-36-2P
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     155554-40-8P
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                                    155554-81-7P
                                                   155554-82-8P
                    155554-84-0P
                                    155554-85-1P
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     155554-87-3P
                    155554-88-4P
                                                   155554-90-8P
                                    155554-93-1P
     155554-91-9P
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                                    155554-97-5P
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                    155554-96-4P
                                                   155554-98-6P
     155554-99-7P
                    155569-64-5P
                                    155609-29-3P
                                                   155616-65-2P
     155643-92-8P
                    155643-93-9P
        (preparation and use of, in image-receptive layers for
        lithog. plate precursors)
L20 ANSWER 30 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
                         1994:120660 HCAPLUS
DOCUMENT NUMBER:
                         120:120660
                         Electrophotographic lithographic master
TITLE:
INVENTOR(S):
                         Kato, Eiichi
PATENT ASSIGNEE(S):
                         Fuji Photo Film Co., Ltd., Japan
SOURCE:
                         Jpn. Kokai Tokkyo Koho, 64 pp.
                         CODEN: JKXXAF
DOCUMENT TYPE:
                         Patent
                         Japanese
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                         KIND
                                DATE
                                             APPLICATION NO.
                                                                    DATE
     JP 04366848 .
                          A2
                                199/21218
                                             JP 1991-142064
                                                                     1991
                                                                     0613
                                19981022
     JP 2813078
                          B2
PRIORITY APPLN. INFO.:
                                             JP 1991-142064
                                                                     1991
                                                                     0613
     In the title master comprising an elec. conductive support having
AB
     thereon ≥1 photocondu¢tive layers containing photoconductive
     zinc oxide, spectral sensitizing dye, and binder resin, said
     binder resin contains resin (A). Resin (A) (weight average mol. weight 1.0
     + 103-2 + 104) has (CHA1CA2CO2R) (A1, A2 = H, halo,
     cyano, hydrocarbon; R = hydrocarbon) as a repeating unit. Resin
     (A) is terminated at one end of the backbone chain with \geq 1
     polar groups selected from PO3H2, SO3H, CO2H, etc. Said
     photoconductive layers addnl. contain nonaq. solvent-dispersed
     resin particles whose size is equal to or smaller than that of the
```

ZnO particles. The above nonaq. solvent-dispersed resin particles are obtained by dispersing and polymerizing ≥ 1 monofunctional

monomers (containing ≥1 precursors of groups such as

dispersion-stabilizing resin.

thiol, amino, phosphono, etc.) in the presence of a soluble

IT 149235-49-4P

(preparation of, as resin for electrophotog. lithog. master)

RN 149235-49-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with 2-carboxyethyl 2-propenoate, 3-[(2,4-dicyanophenoxy)sulfonyl]propy 1 2-methyl-2-propenoate and pentyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 149234-43-5 CMF C15 H14 N2 O5 S

CM 2

CRN 24615-84-7 CMF C6 H8 O4

$$\begin{array}{c} & \circ \\ || \\ \text{HO}_2\text{C}-\text{CH}_2-\text{CH}_2-\text{O}-\text{C}-\text{CH} = \text{CH}_2 \end{array}$$

CM 3

CRN 2849-98-1 CMF C9 H16 O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ & || & || \\ \text{Me- (CH}_2)_4 - \text{O-C-C-Me} \end{array}$$

CM 4

CRN 97-90-5 CMF C10 H14 O4

IT 149235-66-5P

(preparation of, for electrophotog. lithog. master)

RN 149235-66-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, pentyl ester, polymer with 2-carboxyethyl 2-propenoate, 1,2-ethanediyl di-2-propenoate and 2-[[2-(propylsulfonyl)ethoxy]sulfonyl]ethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 149212-82-8 CMF C11 H20 O7 S2

CM 2

CRN 24615-84-7 CMF C6 H8 O4

CM 3

CRN 2849-98-1 CMF C9 H16 O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{Me- (CH}_2)_4 - \text{O-C-C-Me} \end{array}$$

CM 4

CRN 2274-11-5 CMF C8 H10 O4

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H2C=CH-C-O-CH2-CH2-O-C-CH=CH2
     ICM G03G005-05
     ICS G03G005-06; G03G013-28
CC
     74-3 (Radiation Chemistry, Photochemistry, and Photographic and
     Other Reprographic Processes)
IT
     149235-48-3P 149235-49-4P
                                 149235-51-8P
                                                149235-53-0P
     149235-54-1P
                    149235-55-2P
                                   149235-56-3P
                                                  149235-57-4P
     149235-58-5P
                    149275-09-2P
                                   149275-10-5P
        (preparation of, as resin for electrophotog. lithog.
        master)
IT
     25719-51-1DP, carboxy-terminated, ester with 2-hydroxyethyl
     methacrylate, polymer with ethyleneglycol di-acrylate and
     methacrylic acid ester 149235-60-9P 149235-61-0P
     149235-62-1P
                    149235-63-2P
                                   149235-64-3P
                                                  149235-65-4P
     149235-66-5P
                    149235-67-6P
                                   149235-68-7P
                                                  149235-69-8P
     149235-70-1P
                    149235-71-2P
                                   149235-73-4P
                                                  149235-84-7P
                    149275-12-7P
     149275-11-6P
                                   149476-82-4P
                                                  149478-77-3P
     149512-89-0P
                    149512-92-5P
                                   149512-93-6P
                                                  149512-94-7P
     149512-95-8P
                    149512-96-9P
                                   149512-97-0P
                                                  149512-98-1P
                    149544-80-9P
     149512-99-2P
        (preparation of, for electrophotog. lithog. master)
L20 ANSWER 31 OF 31 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
                         1993:549517 HCAPLUS
DOCUMENT NUMBER:
                         119:149517
                         Electrophotographic plate for lithographic
TITLE:
                         plate preparation
                         Kato, Eiichi; Ishii, Kazuo
INVENTOR(S):
                         Fuji Photo Film Co., Ltd., Japan
PATENT ASSIGNEE(S):
                         Jpn. Kokai Tokkyo Kobó, 52 pp.
SOURCE:
                         CODEN: JKXXAF
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         Japanese
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                                                                    DATE
                         KIND
                                DATE
                                            APPLICATION NO.
     JP 04251861
                          A2
                                19920908
                                            JP 1991-26850
                                                                    1991
                                                                    0128
     JP 3048178
                                20000605
PRIORITY APPLN. INFO.:
                                            JP 1991-26850
                                                                    1991
                                                                    0128
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AB In the title electrophotog. plate employing ≥1 photoconductive layer containing photoconductive ZnO and a binder resin, the binder resin contains ≥1 resin (weight-average mol. weight 1 + 103-2 + 104) containing the repeating unit CHalCa2(CO2R) [a1, a2 = H, halo, CN, hydrocarbon moiety; R = hydrocarbon moiety] ≥30% and a polymer component containing groups selected from PO3H2, SO3H, CO2H, PO(OH)R1 (R1 = hydrocarbon moiety, oxyhydrocarbon moiety), and acid anhydride groups 0.5-15%

and the photoconductive layer addnl. contains nonaq. solvent-dispersed resin particles of particle size equal to or less than that of the ZnO particles. The above nonaq. solvent-dispersed resin particles are obtained by dispersion polymerizing ≥ 1 monofunctional monomer containing ≥ 1 CO2H precursor in the presence of a soluble dispersion-stabilizing resin.

IT 130094-33-6P 135740-33-9P 135740-39-5P

(preparation of, as binder resin, for electrophotog. lithog . plates)

RN 130094-33-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-chloro-6-methylphenyl ester, polymer with 2-carboxyethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 126969-77-5 CMF C11 H11 Cl O2

CM 2

CRN 24615-84-7 CMF C6 H8 O4

$$0 \parallel Ho_2C-CH_2-CH_2-O-C-CH=CH_2$$

RN 135740-33-9 HCAPLUS

CN Benzoic acid, 4-ethenyl-, polymer with 2,6-dichlorophenyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 126969-69-5 CMF C10 H8 Cl2 O2

CM 2

CRN 1075-49-6 CMF C9 H8 O2

RN 135740-39-5 HCAPLUS

CN Pentanoic acid, 5-[(2-methyl-1-oxo-2-propenyl)oxy]-, polymer with 2-naphthalenyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 73903-37-4 CMF C9 H14 O4

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ & || & || \\ & \text{HO}_2\text{C}^{--} & \text{(CH}_2)_4 - \text{O} - \text{C} - \text{C} - \text{Me} \end{array}$$

CM 2

CRN 10475-46-4 CMF C14 H12 O2

IC ICM G03G005-05

ICS C08K003-22; C08L101-00; G03G005-08; G03G013-28

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT65697-21-4P 65697-22-5P 126969-70-8P 126969-78-6P 130094-33-6P 130952-79-3P 131808-63-4P 135740-30-6P 135740-31-7P 135740-32-8P **135740-33-9P** 135740-35-1P 135740-36-2P 135740-37-3P 135740-38-4P 135740-39-5P 135740-41-9P 135740-43-1P 135740-44-2P 135740-46-4P 135770-63-7P 135820-62-1P 139663-63-1P 142648-25-7P 146817-57-4P 146817-58-5P 146817-60-9P 146817-61-0P (preparation of, as binder resin, for electrophotog. lithog . plates)